1911.

ANNUAL REPORT

ON THE

HEALTH

OF THE

CITY OF HEREFORD,

BY

J. W. MILLER, M.D., D.P.H., F.C.S.,

Medical Officer of Health;
Medical Superintendent of the City Isolation Hospitals;
and School Medical Officer.

HEREFORD:
JAKEMAN AND CARVER, HIGH TOWN.

CITY OF HEREFORD.

Health Committee :

Alderman E. L. WALLIS, *Mayor.*
Councillor W. C. GETHEN, *Chairman.*

Alderman E. C. Gurney.
Alderman S. H. Prosser.
Councillor G. B. Greenland.
Councillor E. Heins.
Councillor H. R. C. Hewat.
Councillor J. Moore.
Councillor W. Parlby.

Housing Acts Committee :

The MAYOR.
Councillor W. P. LEWIS, *Chairman.*

Alderman J. R. Symonds.
Alderman C. Witts.
Councillor G. B. Greenland.
Councillor F. R. James.
Councillor J. Moore.
Councillor W. Parlby.
Councillor A. D. Steel.

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The MAYOR.
Alderman J. R. SYMONDS, *Chairman.*

Alderman C. Witts.
Councillor W. J. Davies.
Councillor F. R. James.
Councillor E. W. Langford.
Councillor J. Mitchell.
Councillor M. C. Oatfield.

Nominated Members :
Rev. Preb. W. L. B. Janvrin.
Rev. Canon Dolman.
Mr. T. W. Allen.

Selected Members :
The Lord Bishop.
Rev. Preb. W. H. Murray Ragg.
Miss M. Bull.
Miss S. M. Smith.

Medical Officer of Health	J. W. Miller, M.D., D.P.H.
Public Analyst	A. Bostock Hill, M.D., D.P.H., F.I.C.
Sanitary Inspector	S. Protheroe, Cert. Royal Sanitary Institute .
Clerk & Sanitary Assistant	G. H. Williams.
Matron of Isolation Hospital	Miss B. M. Stafford.

Health Office,
Town Hall, Hereford.
23rd March, 1911.

To the Mayor, Aldermen and Councillors of the City of Hereford.

MR. MAYOR AND GENTLEMEN,

I have the honour to submit my Fourth Annual Report on the health of the City, for the year 1911.

The death-rate for the City, in common with other towns in England and Wales, was higher than in 1910. The increase was partly owing to intimation of additional deaths of residents outside the City, through the Registrar General.

Although the death-rate was higher than in 1910, the death-rate of children under one year was 92 per thousand births, compared with a rate of 101 for 1910; the rate is very satisfactory and compares favourably with the rates for England and Wales given on page 14.

It will be seen from the table on page 19 that the death-rate from each of the principal infectious diseases, with the exception of Diphtheria, was lower in comparison with England and Wales; reference is made to the deaths from Diphtheria on page 30. During the year 87% of the cases of Scarlet Fever and 81% of Diphtheria cases notified were removed to the Hospital, the largest percentage removed since the Hospital was open; in connection with the 41 cases of Scarlet Fever removed, there was not a single death.

The question of sanatorium and tuberculin treatment of Consumptives is referred to on page 41.

It is to be regretted that the number of vaccinations of infants is becoming less each year. Reference is made to this question on pages 33 and 34.

The work in connection with the medical inspection of school children is increasing each year and parents are now taking a greater interest in the health of their children. The instruction given by the teachers in regard to habits of cleanliness and other matters which bear on the health of the child, will make a lasting impression on the children, and good results will be seen in the homes of future generations.

I am,
Your obedient servant,
J. W. MILLER,

CITY OF HEREFORD.

STATISTICAL SUMMARY FOR 1911.

Situation : North Latitude	52° 3' 20"
West Longtitude	2° 43' 10"
Area of Municipal Borough	5,031 acres
Rateable Value	£132,158
A Penny Rate Produces	£534
Population at Census, 1911	22,568
Estimated Population to the Middle of 1911	22,598
Average Number of Persons per Acre	4.4
Birth-Rate, 1911	19.2
Average Birth-Rate for the previous five years	22.2
Death-rate, 1911	15.7
Average Death-rate for the previous five years	14.58
Corrected Death-rate, 1911	14.8
Infant Mortality per 1,000 births	92
Average Infant Mortality for the previous five years	110
Phthisis Death-rate	.97
Average for previous five years	1.14

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ANNUAL REPORT

OF THE

Medical Officer of Health

TO THE

TOWN COUNCIL, CITY OF HEREFORD,

FOR THE YEAR 1911.

PHYSICAL FEATURES, &c.

An account was given of the Physical Features of the town, as well as the Geology, Occupation of the Inhabitants, &c., in the Annual Report for 1908, pages 11-13.

POPULATION.

The population of the City, as estimated by the Registrar General to the middle of 1911, is 22,598, and it is on this estimate that I have calculated the various rates for the year 1911.

The population of the City, according to the census taken on April 3rd, 1911, was 22,568. There has been an increase of 1,186 since the last census, in 1901 and the rate of increase 5.5 per cent. for the 10 years, 1901–1911, is the same as for the previous 10 years.

On account of the larger number of old people and larger proportion of females in the City as compared with England and Wales, a correction must be made in estimating the death-rate, for comparison with other towns.

On page 11 of the Annual Report for 1909 is shown the population for years 1754, 1785, 1801, and periods of 10 years after this latter date, with the percentage increase over the previous period. The most marked increase in the population was during the period 1851 to 1861, 29.2 per cent.; for 1811 to 1821 the increase was 24.4 per cent., and for 1891 to 1901 it was 5.5 per cent., more than double the rate of increase during the years 1881 to 1891.

BIRTHS.

During the year 436 Births were registered. Of these four were transferred to other districts in Herefordshire. The total births belonging to the City were 32 (228 males and 204 females).

The birth-rate per thousand of the population is 19.11, compared with 21.85 during the preceding year—a decrease of 2.74 per thousand. The birth-rate for the five years 1906–1910 was 22.1.

The birth-rates for England and Wales for the year 1911 were as follows :—

	Per 1000 of population.
England and Wales	24.6
77 Great Towns	25.6
136 Smaller Towns	23.4
England and Wales, less the 213 towns ..	23.4

Application has been made to the Registrar-General for particulars in regard to the number of married women in the City. When these figures have been obtained it will be possible to form a more accurate comparison with the birth-rate for England and Wales than at present.

On page 8, Annual Report for 1910, the birth-rates for the City for quinquennial periods since the year 1876 are compared with similar rates for England and Wales.

There were 32 illegitimate births registered during the year.

There were 15 illegitimate births in Ledbury Ward, 11 in Leominster, and 2 in Monmouth Ward.

In three cases the mothers belonged to Burghill (births of one boy and two girls), and the mother of the fourth child (a girl) belonged to Little Dewchurch. These cases correspond to four outward transfers (male 1, females 3) made by the Registrar General.

There were two births in the Workhouse. Excluding the four births referred to above, the percentage of illegitimate to total births was 6.4. The percentage for England and Wales for the year 1909 was 4.1.

Out of the 28 illegitimate births, there were 5 deaths under one year, equal to an infantile mortality rate of 178 per 1000 births, compared with 89 per 1000 for legitimate children.

For the first time a list of transferable births registered during 1911 has been issued for each district, and transmitted through the County Medical Officer of Health. During the year there were 4 outward transfers, already referred to. As no allowance has been made in previous years for " transferable births " the birth-rate for 1911 cannot be accurately compared with the rate for previous years.

DEATHS.

The total number of deaths registered during the year was 386 ; of these 42 were non-residents and have been excluded, and 11 deaths of residents outside the district have been included. The nett deaths amounted to 355 (177 males and 178 females) equal to a recorded death-rate of 15.7 and a corrected death-rate of 14.8 per 1000 of the population.

The deaths of three males occurred in the following Asylums :—Brecon and Radnor, Abergavenny, and Hatton Lunatic Asylum, Warwickshire. The death of a female occurred in a nursing home at Liverpool (intimation received from Medical Officer of Health), and of a male in a Hospital at Southwark. A male died on board ship in Blyth Harbour, and the death of a female occurred at Ilfracombe.

Since the beginning of 1911 the Registrar-General has used the sanitary area as the geographical basis of his tabulation ; previous to this year a different area was used. Through the co-operation of the Local Government Board and the Registrar General information in regard to " transferable deaths " *i.e.*, " deaths of persons who, having a fixed or usual residence in England and Wales, die in a district other than that in which they resided," is now circulated from the General Registrar's Office to the localities concerned. The information is sent in the first instance to the County Medical Officer of Health, and this officer forwards the information to the district concerned. A Manual has recently been issued by the Registrar General, in order that the same basis of tabulation of deaths may be used by each Medical Officer of Health as that used by the Registrar-General.

The 42 deaths transferred to other districts during the year exactly corresponds with the number given by the Registrar General. Of the 11 transferable deaths referred to above, five had already been added to the list of deaths of residents ; but in the ordinary way no intimation would probably have been received of the other six deaths.

A male, aged 49 years, who died at the Hatton Asylum, Warwickshire, had only resided in Hereford a few months, from November, 1904, to March, 1905, whilst waiting admission to the Home for Incurables at Leamington.

Of the 42 non-residents, one belonged to Breconshire and the remainder to districts in Herefordshire ; 32 deaths occurred in the Herefordshire General Hospital, and 9 in the Workhouse.

Of residents, 31 deaths occurred in the General Hospital, and have been assigned to their respective wards as follows:—Ledbury 11, Leominster 16, Monmouth 4; 32 deaths occurred in the Workhouse, and have been assigned as follows:—Ledbury 14, Leominster 11, and Monmouth 7.

Taking into consideration the age and sex distribution of the population of the City, as compared with England and Wales, it is necessary in making comparisons with the death-rate for England and Wales and other towns, that a correction should be made. The "Factor for Correction" for the City is .9442. The corrected death-rate is obtained by multiplying the recorded death-rate by this factor.

The method by which this factor is obtained is given on page 19 of the Annual Report for 1908. The corrected death-rate of the City for 1911 was 14.8.

The following are the death-rates for England and Wales for the year 1911:—

	Death-rate.	
	Crude.	Corrected.
England and Wales	14.6	14.6
77 Great Towns	15.5	16.4
136 Smaller Towns	13.8	14.4
England and Wales, less the 213 towns	13.9	13.1

The death-rate for the City compares favourably with the death rates of other towns of the same size.

The largest number of deaths occurred during the first quarter (104), the deaths during the remaining quarters were 93, 80 and 78 respectively.

On account of the information now obtained in regard to transferable deaths there will be a slight increase in the death-rate, so that the rate for 1911 cannot be accurately compared with the rates for previous years.

The percentages of deaths at different age periods for 1910 and 1911 were as follows:—

		1911.	1910.
40	Deaths occurred under 1 year ..	11.3	16.24
14	,, ,, from 1 to 5 years ..	3.9	3.25
27	,, ,, ,, 5 to 25 years ..	7.6	7.79
110	,, ,, ,, 25 to 65 years ..	31.0	32.79
164	,, ,, ,, 65 years upwards ..	46.2	39.93

During 1911 there was a smaller proportion of deaths under one year than in 1910; on the other hand a larger number for persons over 65 years died during the year.

The following table shows the chief causes of death (76 per cent.) during 1911:—

Cause of Death.	Number.	Percentage
Old Age	52	14.6
Heart Disease	43	12.1
Cancer	32	9.0
Pneumonia	32	9.0
Apoplexy (all forms)	31	8.7
Tuberculosis (all forms)	27	7.6
Bronchitis	15	4.2
Diarrhœa and Enteritis	11	3.1
Atrophy, Debility and Marasmus	9	2.5
Bright's Disease	8	2.2
Accidents	6	1.6
Premature Birth	5	1.4
Total	271	76.0

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TABLE OF DEATHS.

From the principal forms of Disease during the last Five Years.

Name of Disease.	1906	1907	1908	1909	1910	Total for 5 yrs.	Average rate 1906-10	1911	Rate for 1911
Small-pox	0	0	0	0	0	0	0	0	0
Measles	3	17	5	4	0	29	.26	4	.18
Scarlet Fever	0	2	1	1	1	5	.05	0	0
Whooping Cough	10	2	3	4	1	20	.18	0	0
Diphtheria and Membranous Croup	8	2	2	1	2	15	.14	3	.13
Typhoid Fever	1	1	0	0	2	4	.04	0	0
Influenza	4	2	3	2	6	17	.15	1	.04
Diarrhœa and Enteritis	11	4	9	7	8	39	.35	11	.49
Puerperal Fever	2	1	0	0	0	3	.02	0	0
Erysipelas	1	0	0	0	1	2	.01	0	0
Phthisis	26	22	31	28	20	127	1.14	22	.97
Other Tubercular Diseases	12	7	11	15	8	53	.48	5	.22
Cancer	23	19	21	29	24	116	1.04	32	1.41
Bronchitis, Pneumonia, Pleurisy, and Diseases of the Respiratory Organs	36	51	36	43	36	202	1.82	52	2.30
Heart Disease	50	54	47	44	44	239	2.15	43	1.90
Violence	1	3	8	8	11	31	.28	6	.27
Other	154	134	150	138	144	720	6.47	177	7.83

The following Table shows the gains and losses in the death rates per 1,000 persons living in the year 1911, compared with the average rate for the five years 1906-10 :—

GAINS.

Name of Disease.	Average Rate 1906-10.	Rate during 1911.	Gains per 1000.	Probable No. of lives gained.
All Causes	14.58	15.74	—	—
Measles	.26	.18	.08	2
Scarlet Fever	.05	.0	.05	1
Whooping Cough	.18	.0	.18	4
Diphtheria and Membranous Croup	.14	.13	.01	under 1
Typhoid Fever	.04	.0	.04	1
Influenza	.15	.04	.11	3
Puerperal Fever	.02	.0	.02	1
Erysipelas	.01	.0	.01	under 1
Phthisis	1.14	.97	.17	4
Other Tubercular Diseases	.48	.22	.26	6
Heart Disease..	2.15	1.9	.25	6
Violence	.28	.27	.01	under 1
Gross Gains			1.19	29

LOSSES.

Name of Disease.	Average Rate 1906-10.	Rate during 1911.	Losses per 1000.	Probable No. of lives lost.
Diarrhœa and Enteritis..	.35	.49	.14	3
Cancer	1.04	1.41	.37	9
Bronchitis, Pneumonia, Pleurisy and Diseases of the Respiratory Organs	1.82	2.30	.48	12
Other	6.47	7.83	1.36	34
Gross Losses			2.35	58

It will be seen that in regard to infectious disease there was a saving in lives in every case. Attention has already been drawn to the exceptionally hot summer, so that a slight increase in the rate for diarrhœa and enteritis on the average for the last five years is to be expected. The particulars on page 10 show that the increase in the deaths during 1911 has been of persons aged 65 years and upwards.

The death of a person in a population of 22,598 corresponds to a rate of .04 per 1,000. Hence the saving or loss of a rate of .04 means the saving or loss of one human life.

UNCERTIFIED DEATHS.

There were two uncertified deaths during the year (.5 per cent.), and the following causes of death were assigned :—Female, 11 months, Inflammation of Lungs ; Male, 75 years, Old Age.

INQUESTS.

During the year 18 inquests were held on the deaths of residents, and the verdicts found by the Coroner's juries were as follows :—

Natural Causes :—	
Apoplexy	2
Heart Disease	2
Diseases of Liver and Heart	1
Aneurysm	1
Septic Poisoning	1
Gastritis and Peritonitis	1
Peritonitis	1
Other Natural Causes (not stated)	2
Accidents or Negligence :—	
Suffocation	1
Burns	1
Injuries	3
Drowning	2

INFANTILE MORTALITY.

During the year 40 deaths occurred of infants under one year of age, and the infantile mortality rate (proportion of deaths under one year of age to 1,000 births) was 92, as compared with 101 in 1910, and an average rate of 110 for the five years 1906-1910. The infantile death-rates for England and Wales during 1911 were as follows :—England and Wales, 130 per 1,000 births ; 77 great towns, 140 per 1,000 ; 136 smaller towns, 133 per 1,000 ; England and Wales (less the 213 towns), 118 per 1,000.

Of the 40 deaths, 26 were of males and 14 of females ; 15 deaths occurred in the Ledbury Ward, 16 in Leominster, and 9 in Monmouth Ward, the rates being 109, 99, and 90 respectively.

Fourteen deaths occurred in the first quarter of the year, 9 in the second quarter, 11 in the third quarter, and 6 in the last quarter. Out of the 40 infantile deaths which occurred, between one-third and a half occurred during the first month and two-thirds during the first six months.

The weather during the third quarter of the year was exceptional, and is referred to in the Quarterly Return of the Registrar-General as follows :—" Until very nearly the middle of September the weather of this period was exceptionally fine, warm and dry, with occasional spells of heat of almost tropical severity. Early in August the thermometer over a large portion of England rose to a higher level than at any time since the commencement of reliable temperature records, 50 or 60 years ago, and a month later, on September 8th, the shade readings were, in many places, the highest recorded so late at a period in the season. After about September 12th the fine, hot, weather came to an end, and for the remainder of the period the conditions were of a cool, showery type."

" The rainfall of the quarter was everywhere very deficient."

Through the courtesy of the Secretary of the Meteorological Society, I am able to give the results of observations taken at the Belmont Station, Herefordshire ; this is at a height of 291 feet above the sea level, and is only 2½ miles from the centre of the City, and within half a mile of the City boundary. The average results for the year are as follows :—

TEMPERATURE.									RAIN.	
MEANS.					EXTREMES.					
9 a.m.	Min.	Max.	Range	Mean	Min.	Max.	Relative Humidity	Amount of Cloud	Am'nt	Days
°	°	°	°	°	°	°	%		in.	
50.0	42.0	57.9	15.9	50.0	18.2	91.6	78.3	6.5	25.40	149

The average minimum temperatures taken on grass for the months of July, August, and September, are as follows :—July, 39.4 ; August, 42.1 ; September, 32.1. The average maximum temperatures in the sun were :—July, 87.1 ; August, 91.6, and September, 85.9 ; and the average mean temperatures taken at 9 a.m. were :—July, 66.8 ; August, 65.8 ; and September, 66.6.

The average amount of rain in July, August, and September was .45, 2.6, and 1.46 inches respectively. Rain fell on three days in July, 9 days in August, and 9 days in September.

Owing to the hot, dry weather the infantile mortality rates for England and Wales for the third quarter of 1911 were high.

The rates were as follows :—

	Per 1,000 Births.
England and Wales	201
77 Great Towns	225
136 Smaller Towns	217
England and Wales, less the 213 towns .	169

The rate for the City for the third quarter was 103.

Commenting on the infantile mortality, the Registrar-General observes that " the rate of 201 per 1,000 births was 60 per 1,000 above the average in the 10 preceding third quarters, and was higher than that recorded in any corresponding quarter since 1901, when the proportion was 208 per 1,000."

The infantile mortality rate of 103 for the City can, therefore, be considered satisfactory, and compares very favourably with the rate of 217 for the 136 smaller towns (of which Hereford is one), and with the rate of 201 for the whole of England and Wales.

During this quarter there were six deaths from Diarrhœa and Enteritis, under 2 years of age, equal to an annual rate of 1.06 per 1,000 of the population at all ages, compared with a rate of 3.81 for the 136 smaller towns and 3.49 for the whole of England and Wales during the same period.

Table IV. L.G.B. (Appendix) shows the various causes of death under 1 year. I have arranged these causes under the various groups, and the rates per thousand births for the year 1911 for the various causes are compared with the averages for the years 1906 to 1910 :—

	1906	1907	1908	1909	1910	Total	Rate per 1000 Births.	1911 No.	Rate for 1911
Premature Birth	5	5	9	9	10	38	15.3	5	11.4
Congenital Defects	3	–	3	3	4	13	5.2	–	–
Atrophy, Debility, Marasmus	7	7	12	12	9	47	18.9	9	20.8
Diarrhœa	8	1	3	3	1	16	6.4	3	6.9
Enteritis	1	3	1	1	6	12	4.8	3	6.9
Convulsions	14	9	4	4	4	35	14.1	5	11.3
Tuberculosis	4	4	7	7	–	22	8.8	2	4.6
Respiratory Disease	12	8	6	6	9	41	16.5	11	25.5
Measles	–	7	1	1	–	9	3.6	–	–
Whooping Cough	7	2	3	3	1	16	6.4	–	–
Other Infectious Disease	–	–	–	–	–	–	–	–	–
Suffocation (Overlying)	2	–	–	–	1	3	1.2	–	–
Other Causes	6	5	3	3	5	22	8.8	2	4.6
	69	51	52	52	50	274	110.0	40	92.0

It will be seen that the rates for Diarrhœa and Enteritis are higher than the average rate for the previous five years, and this also applies to Atrophy, Debility, and Marasmus and Respiratory Diseases. The rates for Premature Birth and all Infectious Diseases are lower.

The following information was obtained in respect to feeding :—

Breast Milk.—(1) A female, 23 days, died from Convulsions. Total children 10 ; 4 living.

(2) Male, 9 days, died from Marasmus and Convulsions. Total children 2 ; 1 living. Child premature, on account of weakness did not take the breast.

(3) Boy, 9 days, died from Marasmus and Convulsions. Total children 1. This infant was weakly from birth.

Breast Milk and Cows' Milk or Artificial Food.—(1) A boy, 8 weeks, died from Convulsions. Total children 2 ; living 1. As the breast milk was insufficient the baby was fed on cows' milk, Neaves' Food, and barley water. At the home there was no through ventilation and insufficient light in the living room.

(2) Boy, 17 days (illegitimate) died from Marasmus. Total children 2 ; dead 2. Was breast-fed for a short time, and afterwards this was supplemented by cows' milk. The house was rather dirty, and there was no through ventilation.

(3) A boy, 11 months, died from Convulsions. Total children 9 ; living 6. Received breast milk for the first four months, and afterwards cows' milk and barley water.

(4) Boy, 8 months, died from Marasmus and Convulsions. Total children 2 ; living 1. Fed on breast milk for one month, cows' milk for five months, and at the seventh month scrapings of bread were added to the milk.

In only a few cases was a suitable boat shaped bottle used ; in the remaining cases a bottle fitted with a long tube was used.

Sanitary Condition of Houses, &c.—This was on the whole satisfactory ; in two cases the houses were back-to-back. There was no overcrowding. There was a pail closet in connection with one house, and the remainder were on the water carriage system ; refuse was deposited in old boxes, tins. &c., and these were emptied weekly.

Food Storage.—The food was kept in a cupboard in the living-room in three houses, and in two houses in the back kitchen or scullery ; in no case was a properly ventilated larder provided.

Remarks.—All the infants belonged to the working class. In some instances prematurity and debility from birth were predisposing causes, whilst in others the substitution of cows' milk for the natural milk of the mother was an important factor in the causation of death.

Reference is made later in the report to the instruction of girls in the elementary schools in respect to the treatment and care of infants.

While the infantile mortality rate for last year is comparatively low, there are indications that there is still ignorance in regard to the feeding of infants.

The rates for the City and the various Wards during the last 10 years are given on page 16 Annual Report for 1910.

ZYMOTIC DISEASE.

In previous years, the zymotic death-rate for England and Wales, the 77 great towns, and 136 smaller towns has been published by the Registrar-General, and comparison has been made with the rate for the City.

The diseases included in the zymotic death-rate were seven in number: Small-pox, Scarlet Fever, Diphtheria, Typhoid Fever, Measles, Whooping Cough, and Diarrhœa.

It was always difficult to know what to include under the term Diarrhœa, owing to the use of other terms, *e.g.*, Enteritis, Gastro-Enteritis, &c.; in addition Zymotic Diarrhœa or Enteritis must be distinguished from Diarrhœa of a non-specific nature. This year instead of the death-rate per 1,000 from Diarrhœa, the death-rate is given from Diarrhœa and Enteritis under 2 years per 1,000 of the population.

During the year there were in the City 6 deaths from Diarrhœa and Enteritis under 2 years (no deaths occurred from 1 to 2 years), and these occurred during the third quarter. The deaths from the other infectious diseases are given in the tables.

The following table shows the death-rate for the City, for the diseases given, compared with the rates for England and Wales for the same period:—

	City of Hereford.	England & Wales.	77 Great Towns.	136 Smaller Towns.	England & Wales less the 213 Towns.
Smallpox	.00	.00	.00	.00	.00
Scarlet Fever	.00	.05	.06	.06	.04
Diphtheria	.13	.13	.15	.12	.11
Typhoid Fever	.00	.07	.06	.07	.07
Measles	.18	.36	.47	.41	.22
Whooping Cough	.00	.21	.24	.18	.19
Diarrhœa and Enteritis (under 2 years)	.26	1.06	1.31	1.14	.77

The death-rate for the City from Diphtheria is slightly higher than that for the 136 smaller towns; the rates for all other disease mentioned are much lower, and this especially applies to Diarrhœa and Enteritis (under 2 years).

SCARLET FEVER.

Forty-seven cases of Scarlet Fever (20 males and 27 females) were notified during 1911, compared with 19 for the previous year; 21 of the cases belonged to Ledbury Ward, 14 to Leominster and 12 to Monmouth Ward. There were no deaths.

The ages were as follows :—

0-5 years.	5-10	10-15	15-25	25-35
10	15	13	7	2

The majority of the cases occurred among children, viz. 80 per cent. under 15 years; 41 of the cases (87 per cent.) were removed to Hospital and no deaths occurred.

A girl (E. S.) aged 4 years had Scarlet Fever and Chickenpox concurrently.

The 47 cases occurred in 37 houses. In 6 instances there were 2 cases in the same house and in two instances there were 3 cases. Several of the houses were large, but in the majority a bedroom was not available for isolation purposes; there was no overcrowding.

On the whole the sanitary arrangements were satisfactory; in connection with one house the drainage was defective and improperly trapped, and the W.C. insanitary and yard not properly paved; in another case the drainage passed into a ditch.

Where two or three persons were affected in the same house the cases occurred within a short interval of each other. In one case there was a long interval and the second case occurred whilst the first case was in Hospital. In another house the third was a "Return Case."

A small outbreak occurred in Westfields during September. A boy L.M. aged 8 years developed the disease on September 6th but the disease was not recognised by the parents, and no medical advice was obtained by them until a recurrence of the throat symptoms on September 23rd, when peeling was found by the medical attendant. This boy probably infected E. B., a girl aged 9 years, who developed the disease on September 7th, H. T., a boy 8 years and V. B., a girl 5 years, who developed the disease on September 21st and 22nd respectively. The boy had played with the other children a few days before the onset of the disease.

In another case the infection appeared to have been conveyed by a grandmother. A boy E. J., 4 years of age, was admitted to the Hospital with Scarlet Fever on October 31st, the grandmother had nursed the child before removal to Hospital, and was at the home of N. S. and F. S. two boys aged 3 and 6 years (who developed the disease on November 11th and 12th) on this date and later.

Two children M. M., and B. M., aged 12 and 13 years developed the disease within a short period after arriving in Hereford from Glou cestershire, and there can be no doubt that they carried the infection with them.

'HOSPITAL' RETURN CASES.—The particulars are as follows :—

Case 1. I. J., girl aged 5 years, illness commenced on Nov. 4th. Infecting case a sister J. J. aged 3 years who was discharged from Hospital on October 6th after 38 days isolation ; there were no complications in Hospital. The child had adenoids and there appears to have been some nasal discharge a few days before the sister developed the disease on November 5th. The children slept together.

Case 2. F. T., female 31 years, developed the disease on Nov. 6th. The infection was probably from her little boy H. T., aged 3 years 6 months, who was discharged from Hospital on Sept. 13th after 51 days isolation. There was some nasal discharge in Hospital, but it was stated that there was no recurrence after his return home. The boy did not sleep in the same room as the mother.

There was no reason to think that any toys or other articles had missed being disinfected. Every precaution was taken in regard to disinfection of person and clothing before leaving Hospital, the throat, ears and nose being disinfected, and a bath given containing disinfectant.

Particulars in regard to the disease since 1875 are given on page 22.

SCARLET FEVER STATISTICS, CITY OF HEREFORD.

Year.	Notifications.	Under 5 years of Age.	Total Deaths.	Attack per 1,000 Population.	Mortality per 1,000 Population.	Case Mortality per cent.	Cases removed to Hospital.	Percentage removed to Hospital.	Deaths in Hospital.	
1875	..	..	7	For this period Statistics not available.	.36					
1876	..	..	75		3.90	..	..	..	..	
1877	..	..	11		.57	..	..	..	..	
1878	..	..	4		.20	..	..	..	..	
1879	..	..	0		.00	..		..	..	
1880	..	..	5		.25	..	..	..	..	
1881	..	..	13		.65	..	..	..	..	
1882	..	..	12	..	.60	..	..	..	..	
1883	62	20	9	3.10	.45	14	..	..	..	(a)
1884	21	11	1	1.05	.04	4	..	..	..	
1885	7	3	0	0.35	.00	0	..	..	..	
1886	15	5	1	0.75	.04	5	..	..	..	
1887	33	3	0	1.65	.00	0	..	..	..	
1888	9	4	0	0.44	.00	0	..	..	..	
1889	14	6	0	0.69	.00	0	..	..	..	
1890	32	9	0	1.58	.00	0	..	..	..	
1891	26	10	1	1.28	.04	3	..	..	..	
1892	72	40	0	3.53	.00	0	..	..	..	
1893	165	94	16	8.07	.78	9	15	9	1	
1894	146	81	3	7.09	.14	2	38	26	0	
1895	155	54	3	7.48	.14	1	70	45	1	
1896	70	20	0	3.35	.00	0	17	24	0	
1897	65	25	3	3.09	.14	4	39	60	1	
1898	31	8	0	1.46	.00	0	15	51	0	
1899	39	13	1	1.83	.04	2	32	85	1	(c)
1900	37	15	1	1.73	.04	2	24	63	1	
1901	51	15	0	2.38	.00	0	32	63	0	
1902	56	8	0	1.67	.00	0	27	75	0	(b)
1903	24	8	1	1.10	.04	4	12	50	1	(c)
1904	65	8	4	2.96	.18	6	45	69	4	(d)
1905	55	6	2	2.49	.09	3	35	64	1	(e)
1906	31	6	0	1.39	.00	0	22	71	0	
1907	34	8	2	1.52	.08	6	26	76	1	
1908	58	9	1	2.59	.04	1	45	77	1	(c)
1909	39	9	1	1.73	.04	2	30	76	1	
1910	19	7	1	.83	.04	5	16	84	0	
1911	47	14	0	2.07	.00	0	41	87	0	

(*a*) For the period, 1883 to 1889 inclusive, notification was voluntary, consequently comparisons with other years are highly unsatisfactory or worthless. Compulsory Notification was adopted in January, 1890, and the Isolation Hospital opened in May, 1893.

(*b*) The Isolation Hospital was closed to the public by order of the Sanitary Committee on February 24th, 1902, pending the erection of a Temporary Isolation Hospital for Small-pox cases. The Hospital was re-opened on 21st. April. During that period 8 patients suffering from Scarlet Fever were treated in their own homes.

(*c*) These persons were in a hopeless condition when removed to Hospital.

(*d*) Of these 4 cases 2 were of a malignant character and considered almost hopeless before removal to Hospital ; the third case was complicated by Diphtheria ; the fourth was accompanied by Bronchitis.

(*e*) This was a case from the Rural Districts admitted into the General Hospital and removed to the Isolation Hospital.

DIPHTHERIA.

During the year 38 cases of Diphtheria (16 males, and 22 females) were notified, compared with 31 in 1910. Fourteen cases occurred in the Ledbury Ward, 21 in Leominster Ward, and 3 in Monmouth Ward.

The ages were as follows :—

Age periods	1-5	5-10	10-15	15-25	25-35	35-45
Number of cases	3	21	8	2	3	1

The majority of cases (84 per cent.) occurred below the age of 15 years, and 63 per cent. below the age of 10 years.

In connection with these 38 cases, 3 deaths occurred, that of a male aged 6 years, and two females aged 2 and 12 years. Further reference is made to these cases on page 30.

Thirty two cases (81%) were removed to Hospital.

The sanitary condition of the houses was on the whole satisfactory.

At two houses the drainage was improperly trapped and the water-closets insanitary, and in connection with another house there was a drain in the cellar improperly trapped. The yard of one house was unpaved, and in connection with another house the cellar was flooded with sewage leaking from an obstructed and defective drainage system. In each case the nuisances were abated.

The thirty-eight cases occurred in twenty-nine houses, mostly of the working class. In two houses two cases occurred within a short interval of each other ; in another house there were three cases, and the interval between the first case and the other two cases was sufficiently long to preclude any connection.

'HOSPITAL' RETURN CASES.—A boy, W. W., aged 5 years, developed the disease on January 21st and was removed to Hospital on January 25th, he was discharged after 53 days isolation. He was detained in Hospital owing to swelling of the glands of the neck, and did not return home until two swabs taken from his throat had been returned negative. On April 1st a sister E. W., aged 2 years, contracted the disease. The children did not sleep together, and, although the boy appeared to be free from infection on his return home, there was probably some infection remaining in the throat.

'HOME' SECONDARY CASE.—A female S. S., aged 69 years, developed the disease on October 27th. Isolation was not properly carried out, and a grandson R. S., aged 9 years, developed the disease on November 3rd and was removed to the Hospital on the following day.

A small outbreak of Diphtheria occurred in the Westfields and Holmer Districts during October and November among the children attending Holmer Infants' School. A boy J. P., aged

5 years, contracted the disease on October 10th, and a girl F. J., aged 7 years, developed the disease on October 20th. The Head-teacher at my request notified all the children suffering from sore throats and swabs were taken from the throats of the children for bacteriological examination. In regard to 12 children Diphtheria Bacilli were found in the throat, 4 children were suspicious, and in 18 cases the results were negative. In no case was there any membrane present, and in the majority of cases there was only slight injection of the fauces and tonsils. Two girls E. H., and J. D., aged 5 years, had rather marked swelling of the glands of the neck and the temperature was raised; these children were admitted to the Hospital. The other children with infection in their throats were kept at home and instruction was given to the mother in each case to spray the throat with disinfectant twice daily, (a metal spray was lent in each case), and instructions were given in regard to isolation. Spraying was continued until a swab had been returned negative. As soon as the throat was free from infection the child was sent to school; the other children that were negative were allowed to return to school immediately. No cases occurred after November 6th and I have no doubt that the precautions taken prevented the spread of the disease. The disease was first spread through children with very slight sore throats acting as carriers; the two cases admitted into Hospital were notified as Diphtheria, but the other children from whom a positive swab was obtained were treated as contacts.

In the majority of cases after a notification had been received swabs were taken by myself from other members of the family, who were in close contact, usually the mother and any other children in the house. Where infection was found in the throat, directions were given in regard to sleeping alone, and the throats being sprayed with disinfectant, and the children did not return to school until the swabs were returned as negative.

The following particulars in regard to the contacts are of interest:—At 31 homes swabs were taken from 114 contacts, viz., mother in 22 cases, father 6, wife 1, children 80 and other persons 5 cases.

Swabs were returned as positive in the following cases:—From mother 3, father 1, wife 1, children 19 and others 1. In 11 cases the swabs were returned as suspicious and in the majority of cases the results were based on Hoffman's bacilli being found (1 case mother, 10 cases children).

Where swabs were taken from the mother or father they were were also taken from the children. In 13 homes there were 24 positive swabs, in another house a swab taken from the wife only was positive; in 17 houses the swabs were negative.

In three houses where 5 swabs were taken 4 were returned as positive; this is exceptional and in the majority of the houses less than one quarter of the contacts appeared to be infectious.

In several cases antitoxin was injected as a prophylactic. On the occurrence of a second case E. W. already referred to, the mother and two children received an injection of 500 units of Anti-Diphtheric Serum each. In this case the swab from the mother was returned positive and the other two children negative.

On August 27th, a boy E. B., aged 6 years, contracted the disease. Swabs were taken from the throats of the mother, father and three children; those from the father and the three children were positive. The father received 800 units and each child 400 units.

After the onset of a second case R. H., aged 6 years, three other children received 2,000 units between them. In this case the swabs were negative; no further cases occurred.

In each case the throats were sprayed until negative swabs had been obtained and no further cases developed.

Where isolation could not be properly carried out, or where no proper nursing could be provided, patients were removed to Hospital, and there can be no doubt that through the early injection of antitoxin and careful nursing many recovered in Hospital who would have died at home.

A large number of swabs were taken for purposes of diagnosis and disinfection. The following are particulars :—

	Positive.	*Negative.*	*Suspicious.*	*Total.*
Diagnosis	34	69	12	115
Contacts	36	115	16	167
Disinfection	43	98	10	151

Of these, 5 were taken at the Isolation Hospital for diagnosis and 75 for disinfection. No patient was discharged from the Hospital until two swabs were returned as negative. The Bacteriological examinations were carried out in the Laboratory of the University of Bristol.

The following are particulars in regard to notifications and deaths from Diphtheria in the City since the year 1901. Particulars in regard to notifications and deaths since 1890 are given on page 37, Annual Report, 1909.

	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Notifications	9	14	18	36	55	102	21	26	18	31
Deaths	2	2	2	7	11	8	2	3	1	1

ERYSIPELAS.

Seventeen cases were notified (11 males, 6 females) compared with 19 for last year. There were no deaths; three cases occurred in Ledbury Ward, 7 in Leominster and 7 in Monmouth Ward. One of the cases was notified from the Herefordshire General Hospital.

The ages were as follows :—

Age period	10-15	15-25	25-35	35-45	45-55	55-65	65 and upwards.
No. of cases	3	1	2	3	4	1	3

The following parts were affected :—

Face, 11 ; arm, 3 ; leg, 2 ; and foot, 1.

There was a history of injury in 6 cases, and in one instance the disease was associated with a malignant tumour of the neck, and in another case with a sore on the thumb.

On the whole the sanitary condition of the houses was good. In connection with one house the drainage was not properly trapped and the watercloset defective. At another house there was no through ventilation and the watercloset was defective.

PUERPERAL FEVER.

No cases of this disease were notified during the year. The notifications during the last 10 years were as follows :—

1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
0	1	2	2	3	3	2	0	0	0

The deaths from this disease for the last ten years are given in the table on page 12.

TYPHOID FEVER.

Two cases were notified, both males, compared with 10 cases in 1910. The patients, aged 13 and 21 years, were treated in the Herefordshire General Hospital and both recovered. Both the cases were from the Leominster Ward. At the homes the drains were satisfactory in each case.*

The following are particulars in regard to notifications and deaths from Typhoid in the City during the last 10 years. Particulars of notifications since 1891 are given on page 37, Annual Report for 1909, and particulars in regard to deaths since 1875 on page 28 of the same Report.

	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Notifications	3	2	1	3	0	3	1	0	6	10
Deaths	0	0	1	0	0	1	1	0	0	2

ZYMOTIC DIARRHŒA.

Four deaths occurred from this disease, of two males aged 25 days and 7 months, and two females aged 22 days and 5 months respectively. Two belonged to Ledbury Ward and two to Monmouth Ward. Considering the exceptionally hot, dry summer the number of deaths was moderate.

In each case I visited the home and made enquiries, and the particulars are as follows :—

1. Male, 7 months, died on July 28th. Was breast fed during the first month, but owing to the ill-health of the mother this could

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*Two specimens of blood were examined for the Widal reaction, one gave a positive reaction.

not be continued, and it was afterwards fed on cows' milk diluted with water ; a boat shaped bottle was used. The milk was kept in a cool cellar and boiled before use. There were not many flies.

The sanitary arrangements of the house were satisfactory.

2. Female, 5 months, died on August 27th. The baby was breast-fed during the first four months, and afterwards fed on cows' milk diluted with water, owing to there being a deficiency of breast milk ; a feeding bottle with a long tube was used. The milk, which was covered over and kept in the scullery was boiled before use. There were a large number of flies. A brother aged 2 years was suffering from the same complaint at the time of my visit. The house was rather dirty and there was no proper through ventilation ; the drainage was satisfactory.

3. A male, 25 days, died on September 8th. Fed on cows' milk and barley water for 3 days, and with barley water and albumen water the remainder of the time ; a boat-shaped bottle was used. The milk, which was not covered over, was kept in a cupboard in the front living room. There had been a fair number of flies.

The yard was very small and there was no open space at the back.

4. Female, 22 days, died on September 2nd. Was breast-fed for 9 days and afterwards owing to there being insufficient breast milk, was fed on cows' milk and barley water ; a bottle with a long tube was used. The milk was covered over and kept in the scullery. There were a large number of flies ; there was no through ventilation. The drainage was apparently satisfactory.

In each case the refuse was deposited in boxes and removed weekly.

A circular dated August 18th was sent to your Council by the Local Government Board in reference to the prevalence of Epidemic Diarrhœa among children. It was stated that the Board had under their consideration the excessive child mortality, especially from Diarrhœa, and Enteritis, which accompanied the very hot and dry summer.

Advice was given in reference to the precautions which were to be taken to prevent the disease, and it was pointed out that it was important :—

" Firstly, that exact advice should be given as to the feeding and management of children, and more generally as to preventing exposure of their food to contamination from decomposing organic matter. The distribution of clearly worded leaflets is useful in this connection : but even more important are personal visits and the offer of practical advice to the mothers of babies born within the last twelve months."

" Secondly, the full value of the personal instructions indicated above cannot be realised unless vigorous efforts are made to prevent the accumulation in or in the vicinity of the house of decomposing animal or vegetable matter. It is not necessary to do more than mention the importance of efficient scavenging, of frequent and, if practicable, daily removal of house and stable refuse, of domestic cleanliness, and of keeping all food properly protected."

" Thirdly, it is important that the Council should promptly ascertain in which parts of their District Diarrhœa is especially prevalent, and should devote close attention to street and court scavenging, and to the removal of stable and domestic refuse in these areas."

For several years past a large number of leaflets have been sent out during the Summer months to the occupants of most of the houses in which a birth has occurred within the previous 12 months; during 1911 over 400 leaflets were distributed.

Directions are given in the leaflets in regard to the protection of food from flies and dust, the prevention of any accumulation of refuse or rubbish, and the importance of general cleanliness; flies readily breed in decomposing animal or vegetable matter and convey infection to food, especially milk. It was also recommended that all food should be stored in a clean, cool place, that milk should be boiled before use, and that no unwholesome food, unripe or over-ripe fruit should be eaten.

During the summer months a large number of visits were paid to stables, pigstyes and other places where there were likely to be accumulations of manure or other refuse, and in each case any nuisance that was found was abated. Particulars in regard to these visits, and also remarks on scavenging are given later in the report.

MEASLES.

During the year there were four deaths from this disease, of males aged 15 months, 23 months, 2 and 6 years respectively. Three of the deaths occurred in Ledbury, and 1 in Monmouth Ward. Particulars in regard to deaths since 1875 are given on page 28, Annual Report for 1909.

During the last quarter of the year outbreaks of the disease occurred among the children attending Scudamore and All Saints' Infants' Schools. Particulars are given later in the Report.

WHOOPING COUGH.

There were no deaths from this disease during the year. One death occurred in 1910 and four in 1909. Particulars in regard to deaths since 1875 are given on page 28 Annual Report for 1909.

INFLUENZA.

There was one death from this disease during the year, of a female aged 60 years, belonging to the Leominster Ward, compared with 6 in 1910.

CITY HOSPITALS.

During the year 43 cases of Scarlet Fever and 31 cases of Diphtheria were admitted to the Hospital. Two of the Scarlet Fever patients belonged to outside districts. A nurse, M.W., was admitted from Hay in April 20th, at the request of the authorities of the Herefordshire General Hospital; she had contracted the disease through nursing Scarlet Fever patients.

A boy, G.W., who resided with his parents in a caravan at Peterchurch, Herefordshire, developed the disease and was taken to the Tupsley Hospital by his mother. These people were employed at fairs, and travelled about the country.

No deaths occurred from Scarlet Fever.

The particulars in regard to complications and sequelae are given below:—

SCARLET FEVER.

Ear Discharge	1 case (double)
Nasal Discharge	5 cases
Adenitis (*a*) non-suppurative	5 ,, (three one side only)
,, (*b*) suppurative	1 case (both sides of neck)
Bronchitis	3
Laryngitis	1
Tonsillitis (convalescent)	3
Nephritis	2
Albuminuria	2
Dilated Heart	1
Mania	1
Sores	
(*a*) Nose	5
(*b*) Fingers	4
(*c*) Toes	1
(*d*) Head	1
(*e*) Cheek	1
(*f*) Angles of Mouth	1

There were three instances of two diseases occurring at the same time. A girl, E.G., aged 13 years, had Diphtheria, as well as Scarlet Fever; the diagnosis was verified by means of a bacteriological examination of a throat swab taken during the rash. The Diphtheria affected the heart, and prolonged convalescence.

A girl, J.J., aged 4 years, had the remains of Chicken-pox vesicles when admitted. Another girl, J.H., aged 4 years, developed Measles five days after the onset of Scarlet Fever.

Particulars in regard to stay in hospital, &c., are given on page 32.

DIPHTHERIA

Paralysis affecting the Heart ..	10 cases
,, of Palate	4 ,,
,, Ocular Muscles	2 ,,
,, Lower Extremities	1 ,,
Bronchitis	4 ,,
Laryngitis	3 ,,
Adenitis (Cervical)	1 case
Anuria	1 ,,
Nasal Discharge	1 ,,
Sores—Nose	1 ,,

Two children had septic fingers.

Three deaths occurred. A girl, aged 2 years, died on the forty-fourth day of the disease; she was admitted on the seventh day of the disease, and suffered from paralysis of the palate, ocular muscles and muscles of the lower extremities; the heart was also affected.

A girl, E.H., aged 6 years, died on the fifth day of the disease, the day after admission.

I believe that in both these cases life might have been saved if the patients had been sent into hospital earlier, and antitoxin injected. A boy, E.H., aged 6 years, died from heart failure on the eighth day of the disease, and the sixth day after admission to Hospital; in this case antitoxin was injected on the third day of the disease. It is most important that antitoxin should be injected at an early a stage as possible in the disease, and the longer the injection is delayed the greater the mortality; statistics showing this are given on page 43, Annual Report for 1909.

Antitoxin is supplied free of cost in the case of persons unable to afford the treatment. A supply of antitoxin is kept at the Health Office, and when this office is closed, at the Central Police Station.

The following are particulars of cases admitted to the Tupsley Hospital during 1911, the day on which antitoxin was injected is given :—

Cases treated on the	1st	day of the Disease .	1
,,	2nd	,, ..	8
,,	3rd	,, ..	6
,,	4th	,, ..	6
,,	5th	,, ..	7
,,	6th	,,	1
,,	7th	,, ..	2

Two cases had received antitoxin before admission, on the first and second days of the disease.

Some of the children admitted on the fourth day and after, only recovered with very careful nursing, and probably would not have survived had they been treated at home. A few of the cases were very mild in character.

ADMINISTRATION.

The cost of administration of a small Hospital is always greater than a large one. This applies to nursing, food, heating, light, &c. Where two diseases, *e.g.*, Scarlet Fever and Diphtheria, are treated at the same time, a separate staff of nurses must be kept for the Diphtheria cases, so that sometimes there may be only one patient and two nurses. Economy might have been effected in the past had a joint hospital been built to serve several districts. In a county the size of Herefordshire, several joint hospitals are needed under boards formed of the various representatives of district councils.

During the last quarter of the year, altogether 24 cases of Scarlet Fever and 12 cases of Diphtheria were admitted. Owing to the increased number of patients, the cost per head for the last quarter for patients and staff was 6s. 1d., and the average for the three previous quarters was 8s. 6d.

ISOLATION HOSPITAL, 1911.

DISEASE.	Patients remaining in Hospital on January 1st, 1911.			Patients Admitted and Discharged in 1911.			Patients remaining in Hospital on January 1st, 1912.			‡ Total Number Discharged.	Average Days in Hospital.	Total Deaths.	Average Days in Hospital.
	Total	Recovered	Died	Total	Recovered	Died	Total	Recovered	Died				
Scarlet Fever	2	2	..	*† 33	33	..	10	10	..	* 35	47	..	..
Diphtheria	4	4	..	27	24	3	4	4	..	28	41·4	3	14
Enteric Fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS	6	6	..	60	57	3	14	14	..	63	44·2	3	14

* Including two cases admitted from outside the City.

† One of these cases was also complicated by Diphtheria.

‡ Including those admitted in 1910 and discharged in 1911.

DISINFECTION.

The following are particulars in regard to disinfection of houses and bedding with the exception of phthisis, particulars of which are given on page 38.

Disinfection.	*Houses.*	*Bedding.*
After Scarlet Fever	39	39
,, Diphtheria	30	24
,, Typhoid Fever	1	2
,, Erysipelas	–	1
,, Other Diseases	12	12
Total	82	78

The whole of the bedding and the following articles were disinfected by steam :—

79 Articles of Clothing.
13 Rugs and Carpets.
12 Towels.
17 Cushions.
28 Miscellaneous Articles.

The rooms were disinfected with formalin vapour.

SMALL-POX.

No cases have been notified during the year. In my Annual Report for 1908 I referred on pages 46 and 47 to the cases which had occurred during the last 30 years.

I am indebted to Mr. R. Moore, Clerk to the Guardians, for the tables which follow in regard to vaccination. It will be seen that the number of so-called " conscientious " objections is unfortunately increasing. There were 28 objections in 1907, 42 in 1908, 116 in 1909, 157 in 1910 ; for the first six months of 1911 there were 71.

It is only by vaccination and re-vaccination that a community can protect itself from Small-pox. I think it would be a good object lesson for some of the parents of Hereford children, if they visited the Cemetery at Gloucester and saw the graves of the 279 unvaccinated children, under 10 years of age, who fell victims to the epidemic of Small-pox in Gloucester in 1895-6, and the grave of only one child out of more than 8000 children who were vaccinated before or during the epidemic.

VACCINATION.

PERIOD.	No. of Births Registered.	Successfully Vaccinated	Insusceptible to Vaccination.	Had Smallpox.	Number in respect of whom Certificates of Conscientious Objection have been received.	Died Un-Vaccinated.	Postponement by Medical Certificate.	Removals of which Vaccination Officer was apprised.	Unknown Removals. Cases not found.	Unaccounted for.
Year ending Dec. 31. 1910	488	213	1	–	157	39	32	9	17	20
Jan. 1st to June 30, 1911	222	93	–	–	71	13	13	10	10	12

PLAGUE.

In November, 1910, a memorandum on Plague was issued by the Chief Medical Officer of the Local Government Board. An account was given of the general characteristics of the disease and measures to be used to prevent the spread of the disease. It was pointed out that the continuous suppression or limitation of rats in a district into which rat-plague has been introduced will prevent the occurrence of human plague of local origin.

At the meeting of the Health Committee held in December, I presented a report on the memorandum of the Local Government Board, and was able to give information obtained by personal experience in connection with Plague work in India. I suggested that it would be useful to draw the attention of persons whose premises were particularly liable to be infested with rats, to the desirability of keeping the numbers down. A leaflet issued by the Board of Agriculture on the Destruction of Rats was sent to between two and three hundred persons.

PHTHISIS.

Twenty-two deaths occurred from this disease during the year, of 9 males and 13 females.

The ages were as follows :—

Years ..	15–20		20–25		25–35		35–45		45–55		65–75	
	M	F	M	F	M	F	M	F	M	F	M	F
Number ..	–	3	2	2	3	2	3	1	1	3	–	2

There were 8 deaths in Ledbury Ward, 9 in Leominster, and 5 in Monmouth Ward ; four deaths occurred in the Workhouse and one in the Burghill Asylum.

The rate per 1,000 of the population for 1911 was .97, compared with a rate of 1.14 for the previous five years. On page 46 Annual Report for 1909 a table is given shewing the death rates per 1,000 from Phthisis for the City and England and Wales since 1876.

NOTIFICATIONS.

Eight Poor-Law cases were notified and 10 cases voluntarily during the year. A summary of the Public Health (Tuberculosis) Regulations, 1908, is given on pages 60 and 61 Annual Report for 1909.

Form A.—Notifications were received from the Medical Officer of the Workhouse that 4 males and 2 females had been admitted with Phthisis. A male and a female did not belong to the City.

Form B.—Notifications were received that 4 males and 4 females were suffering from the disease. Two of these cases (a male and a female) were treated in the Workhouse.

Form C.—A notification was received from the Superintending Officer of the Workhouse that a male suffering from Phthisis had left the Institution and returned home.

Under the Public Health (Tuberculosis in Hospitals) Regulations, 1911, I sent a transfer of a case of Phthisis notified from the Herefordshire General Hospital to the Medical Officer of Health for the Hereford Rural District ; another notification was received from Middlesex, and was sent on to the same Officer.

During the year I made enquiries at the houses of all but one of the Poor-law cases (one visited in 1912) and at six houses of the voluntary cases ; I also made enquiries into three deaths from the disease, of three females, aged 19, 21, and 25 years.

The ages of the notified cases were as follows :—

Males—6, 20, 20, 25, 36, 39, 45, and 55 years.
Females—17, 19, 23, 31, and 38 years.

Three males and three females died from the disease during the year, and of these two were voluntary notifications and four Poor-law cases.

Duration of Illness.—The following are particulars in regard to the notified cases :—

In 1 case the illness lasted several months
,, 1 ,, ,, ,, 4 ,,
,, 2 cases ,, ,, 6 ,,
,, 1 case ,, ,, 8 ,,
,, 1 ,, ,, ,, 9 ,,
,, 1 ,, ,, ,, 1 year
,, 1 ,, ,, ,, 2 years
,, 2 cases ,, ,, 3 ,,
,, 1 case ,, ,, 5 ,,
,, 2 cases ,, ,, several years

In regard to the three deaths the illness had lasted 2½ years in one case, and 3 years in the other two cases.

Continued Working.—It is interesting to note for what period work was continued after the onset of the disease.

Three persons (a male and two females) had not worked since the onset of the disease.

One had continued working for a few months.

For 4 months 1 had continued working.
,, 6 ,, 1 ,, ,,
,, 1 year 10 months 1 ,, ,,
,, 2 years 1 ,, ,,
,, 3 ,, 1 ,, ,,
,, several years 3 ,, ,,

A boy, aged 6 years, had attended school for a few months, in the early stage of the disease.

In regard to the three deaths. In one case work was followed for 1½ years; in the two remaining cases work was not continued after the onset of the disease.

Source of Infection.—In the case of a female, aged 19 years, infection was probably from the mother. The illness of the daughter commenced a few months after the death of the mother.

A male, 20 years, was probably infected by a brother with whom he slept, when he was affected with the disease.

In two cases there was a history of intemperance and infection was probably from the Public House.

Hereditary Pre-Disposition (Notifications and Deaths).—There was a family history in 6 cases; the particulars are as follows:—

Father, two sisters, and two brothers had died from the disease; father and a brother, in one case, mother and a sister in another case had died from the disease.

In two cases—two brothers and two sisters; in another case, both grandparents (mother's side) had died from the disease.

Occupation (Notifications and Deaths).—The occupation followed was as follows:—

Males.—Tailor, carter, hairdresser, ironmonger's assistant, compositor, newsagent, collier. The newsagent delivered newspapers in the country districts, and so was exposed to extremes of weather.

Females.—Housemaid, general servant, string winder, dressmaker, assistant in draper's shop. Three had followed no occupation.

Previous Illness.

Two males, aged 36 and 39 years, had suffered from Influenza before contracting the disease. A female, 21 years of age, had Pleurisy and Pneumonia before the onset of Phthisis.

Social Habits.—Of 15 adults, 4 were total abstainers (1 male, 3 females), 9 were said to be temperate (4 males, 5 females), and 2 (both males) had been intemperate.

Sanitary Condition of the Houses Visited.

4 houses had 3 rooms
2 ,, ,, 4 ,,
6 ,, ,, 5 ,,
4 ,, ,, 6 ,,
In 6 houses there were 2 bedrooms
,, 8 ,, ,, 3 ,,
,, 2 ,, ,, 4 ,,

Ten of the houses contained a scullery and eight a cellar.

The number of occupants, including the Consumptive, was as follows :—

In 1	house	there were	2	persons
,, 3	houses	,,	3	,,
,, 2	,,	,,	4	,,
,, 3	,,	,,	5	,,
,, 1	house	,,	6	,,
,, 5	houses	,,	7	,,
,, 1	house	,,	8	,,

The average number of persons per house was 5.1.

In the house containing 6 persons there were 2 bedrooms. The three houses containing 7 persons had 3, 2, and 2 bedrooms. The house containing 8 persons had 3 bedrooms. There was no overcrowding.

In the majority of the houses isolation of the consumptive was a matter of difficulty.

In two houses the living-room was damp ; the living rooms and bedrooms were rather dirty in three houses.

Previous Residence.—In two cases the disease had developed in other houses in the city, viz., in Nelson Street and Ross Road. Period of residence in Hereford had varied from a few weeks to one year in four other cases, and the disease had commenced in Pensalt, London, Tredegar, and Sheffield.

Precautions Taken.

1. At Home.—In eight houses isolation was carried out in one of the bedrooms and in one house in the front living room.

In regard to the disposal of sputum, this was received into a vessel without disinfectant in three cases, and into a vessel with disinfectant in three instances. In three cases the sputum was received into rags and burnt. Either handkerchiefs or a vessel containing disinfectant were used in one case, and in another a receptacle containing sawdust, which was afterwards burnt. In another instance, paper or a vessel containing disinfectant was used, and the paper afterwards burnt. In three cases there was said to be very little sputum, and in another case no precautions were used.

2. At Work.—A spit bottle was used by one person, and handkerchiefs during expectoration by several others. In the remaining cases no precautions were taken.

Disinfection.—After death 11 rooms and 9 lots of bedding were disinfected. In several instances disinfection of rooms was carried out by relatives or friends.

Bacteriological Examination of Sputum.—Sputum was sent to the Bristol University for examination for tubercle bacilli in 19 cases, and bacilli were found in 4 cases.

OTHER FORMS OF TUBERCULOSIS.

Five deaths occurred during 1911 from other forms of Tuberculosis than Phthisis, of 3 males and 2 females. All the deaths occurred in Ledbury Ward.

The rate per 1,000 of the population was .22, compared with a rate of .48 for the previous five years.

Particulars in regard to form of disease and age are given in Appendix A.

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1911.

The Regulations which were issued by the Local Government Board in 1908 provided for the notification of all cases of Consumption occurring in Poor-law Institutions, or under the care of District Medical Officers. An account of these Regulations is given on page 60 of my Annual Report for 1909.

In March, 1911, further Regulations were issued by the Board extending the system of notification to cases occurring among the in-patients or out-patients at Hospitals, or other similar institutions for the treatment of the sick. It is provided that the Medical Officer of any Hospital or Dispensary on becoming aware that a person is suffering from Consumption, shall transmit a notification of the case (whether the person belongs to the district or not in which the Hospital is situate) to the Medical Officer of Health for the district the Hospital is in.

Where the patient does not reside in the same district, it is the duty of the Medical Officer of Health to transmit the notification to the Medical Officer of Health for the area in which the patient's residence is situate.

In November, 1911, further Regulations were issued by the Board completing the system of notification, which already applied to Poor-law and Hospital cases. The Regulations came into force on January 1st, 1912, and under Article IV. " every Medical Practitioner attending on, or called in to visit any person, shall within forty-eight hours after first becoming aware that such person is suffering from Pulmonary Tuberculosis, complete, sign, and transmit a notification of the case in the form shown in Schedule A to these Regulations to the Medical Officer of Health for the area within which the place of residence of the person is situate."

" Provided that a Medical Practitioner shall not be required under these Regulations to notify any case of Pulmonary Tuberculosis which has already, to his knowledge, under these Regulations or under the Poor-law Regulations or under the Hospital Regulations, been notified to the Medical Officer of Health for the area within which the place of residence of the patient is situate."

It is also provided that every School Medical Officer shall notify cases found during Medical Inspection, to the Medical Officer of Health of the area within which the public elementary school is situate.

Books containing notification forms have been sent to the Herefordshire General Hospital, the Hereford Dispensary, and the Victoria Eye and Ear Hospital, and books of forms in accordance with Schedule A to every practitioner. Forms provided by the Board of Guardians are to be used for Poor-law cases, the special forms for Hospital and Dispensary cases, and the ordinary forms for any other cases that may occur.

Under Article X. there is no obligation to notify imposed upon any medical practitioner acting as—

Medical Officer of one of His Majesty's Prisons, or of a Certified Reformatory School;

Medical Officer of an Institution for Lunatics;

Medical Examiner of candidates for some office or appointment;

Medical Examiner on behalf of an Insurance Company of a person proposing to insure his life at the risk of that Company.

Under Article VIII., "Upon receipt of a notification under these Regulations or under the Poor-law Regulations or under the Hospital Regulations the Medical Officer of Health, or an officer acting under the instructions of the Medical Officer of Health, shall make such enquiries and take such steps as may appear to him to be necessary or desirable for preventing the spread of infection and for removing conditions favourable to infection."

Article XIII. provides that "Nothing in these Regulations shall have effect so as to apply, or so as to authorise or require a Medical Officer of Health or a Council, or any other person or authority, directly or indirectly, to put in force with respect to any patient in relation to whom a notification in pursuance of these Regulations has been transmitted to a Medical Officer of Health, any enactment which renders the patient, or a person in charge of the patient, or any other person, liable to a penalty, or subjects the patient to any restriction, prohibition, or disability affecting himself, or his employment, occupation or means of livelihood, on the ground of his suffering from Pulmonary Tuberculosis."

ADMINISTRATIVE MEASURES.

An account has been given on pages 57 to 59 of my Annual Report for 1909, and on pages 33 and 34 of the Annual Report for 1910, of the measures which are being taken in this City to prevent the spread of Consumption.

A public meeting was held in March, 1911, to consider the question of providing a sanatorium as a County Memorial to the late King Edward. On account of prospective legislation to deal with the provision of Sanatoria and other institutions for treatment of the disease through the National Insurance Act, further discussion was deferred. Under Section 15 (1) of the Act it is provided that " For the purpose of administering sanatorium benefit local Insurance Committees shall make arrangements, to the satisfaction of the Insurance Commissioners :—

(*a*) with a view to providing treatment for insured persons suffering from tuberculosis or any other such disease as aforesaid in sanatoria and other institutions, with persons or local authorities having the management of sanatoria or other institutions approved by the Local Government Board ; and

(*b*) with a view to providing treatment for such persons otherwise than in sanatoria or other institutions, with persons and local authorities other than poor-law authorities undertaking such treatment in a manner approved by the Local Government Board, which treatment (including the appointment of officers for the purpose) it shall be lawful for a local authority, if so authorised by the Local Government Board, to undertake."

Altogether, it is estimated that a million pounds a year will be available for such benefits.

The advantages of sanatorium treatment are as follows :—

(*a*) Cure of early cases.
(*b*) Arrest of disease in other cases.
(*c*) Educational benefits by periods of short stay in the Institution.
(*d*) Greater advantage of treatment than that possible in the home.
(*e*) Benefits to family and supervision in the home, opportunity of disinfection of house, economic benefits.

It is important that the open-air treatment should be continued after the patient returns home from the sanatorium, and local authorities have the power to provide shelters. The shelters can be provided at a small cost, and can be set up in any yard or garden. In addition to the sanatorium treatment, it is important that tuberculin treatment should be carried out in the sanatorium and, in suitable cases, after the patient's return home. In some cases persons have been cured, who have followed their ordinary occupation, under this treatment alone.

It would appear that any institutional treatment either in a sanatorium or a tuberculin dispensary could be best carried out under the administration of the County Council.

No special provision has yet been made in the Workhouse for the treatment of advanced cases of the disease.

TUBERCULOSIS IN COWS.

On pages 73-77 of my Annual Report for 1909, and on page 34 Annual Report for 1910, I gave an account of the methods adopted in this country and on the Continent in connection with the eradication of Tuberculosis in cows.

CANCER.

There were altogether 32 deaths from Cancer (of 12 males and 20 females). The rate was 1.41 per 1,000 of the population, compared with 1.04 for the previous five years.

Five of the deaths were under 45 years, and 23 at an age of 55 and over.

The parts affected are shown in the following table :—

Part	*Males.*	*Females.*	*Total.*
Breast	–	3	3
Reproductive Organs	–	6	6
Stomach	1	–	1
Liver	4	4	8
Bowel	2	6	8
Kidney	–	1	1
Thyroid Gland	1	–	1
Lip	1	–	1
Mouth	2	–	2
Other	1	–	1
TOTAL	12	20	32

There appears to be no diminution in the number of deaths from cancer. At present the only means of getting rid of the disease, in the majority of cases, is by surgical operation ; at the same time there is evidence to show that, where the cancer is superficial, *e.g.*, in affection of the skin of the face, cures have been effected in a few cases by X-ray or radium treatment.

It is well known that any chronic irritation acts as a predisposing cause. Chronic dyspepsia may pave the way for cancer of the stomach, and irritation of a clay pipe has been known to start disease in the lip.

Alcohol has an influence on the disease. It has been shown by statistics that the cancer incidence in any trade varies with the attendant habits as regards alcohol. Figures obtained from the United Kingdom Temperance and General Provident Institution show that the mortality from cancer among the insured in that institution is much lower among the abstainers. The particulars are given in the table.

Aggregate Population or years of life at risk during years 1891, 1896, 1901, and 1906.		Deaths during the years 1891, 1896, 1901, and 1906.			
		From all Causes.		From Malignant Diseases.	
Abstainers' Section.	Non-Abstainers' Section.	Abstainers' Section.	Non-Abstainers' Section.	Abstainers' Section.	Non-Abstainers' Section.
61,378	52,730	1,034	1,549	76	140

RESPIRATORY DISEASE.

During the year there were 15 deaths from Bronchitis, 32 from Pneumonia, 2 from Pleurisy, and 3 from Asthma. The respiratory rate was 2.30, compared with 1.82 for the previous five years. Particulars in regard to ages are given in Table A, Appendix.

The majority of deaths from Bronchitis (two-thirds) occurred among persons 65 years and over ; four deaths occurred under one year.

In regard to Pneumonia 7 deaths occurred at ages 45 to 65 years, 10 from 65 years upwards, and 12 under the age of 25 years (7 under 1 year).

Particulars in regard to the respiratory rate since 1876 are given in the Annual Report for 1909, page 71.

REMARKS.—The death-rate from Pneumonia is higher than that from Phthisis, thus agreeing with the rates for England and Wales. The death-rate per 1,000 of the population for England and Wales during 1909 was 1.29 for Pneumonia, and 1.08 for Phthisis. The germs which cause the disease are widely spread, and could be isolated from the mouths of a good many healthy persons. Although usually harmless, the germs may become virulent in the presence of septic conditions of the mouth, *e.g.*, if caused by decayed teeth, and also when the resisting power of the individual is lowered by any cause, as undue exposure, debility caused by insufficient nourishment or illness, &c., indulgence in alcohol. Under these conditions the germs readily find their way into the lungs and produce the disease ; these causes also predispose in the case of other diseases referred to below. It is important that the throat and nose should be kept free from any inflammation, as these sensitive organs are frequently the paths of infection, not only for pneumonia, but also for bronchitis, rheumatic fever, influenza, diphtheria, scarlet fever, cerebrospinal fever, &c. The advantage of having treatment for enlarged tonsils and adenoids in the case of children is referred to later.

It will be seen from the figures given above that Bronchitis is most common at the extremes of life. Infants are particularly susceptible to chest complaints.

ALCOHOLISM.

There was no death from Alcoholism during the year. Two males, aged 51 and 74 years, died from Cirrhosis of the Liver, which is often associated with alcoholism. Although no deaths were attributed to this cause, there can be no doubt that alcohol was the indirect cause in other diseases, *e.g.*, of the heart, blood vessels, kidneys, &c. In his Annual Report of the Hereford County and City Asylum for the year ending March 31st, 1911, Dr. Morrison refers to the causation of insanity in the admissions, and states that alcohol was ascertained to be a primary or directly contributory cause in 26.6 per cent of the cases.

The figures given on page 43 in connection with Cancer show that among insured persons the death-rate was 16.8 per 1,000 in the case of abstainers, and 29.3 among non-abstainers.

OTHER CAUSES OF DEATH.

Heart Disease.—Forty-three deaths were attributed to this disease, of which 8 occurred between the ages of 65 and 75 years, and 6 at the age of 75 years and upwards. Probably one-third of the deaths were the result of old-age. Death through valvular disease of the heart caused by Rheumatic Fever appears to be uncommon.

Old Age.—Of the 31 deaths which occurred from this cause, 11 were at ages 75 to 85 years, and 13 persons died at ages of 85 and upwards. Two males and a female attained the age of 90 years, and a female the age of 97 years.

On Table A, Appendix, all the causes of death registered during the year are given in detail.

COWSHEDS, DAIRIES, AND MILKSHOPS.

There are the names of 13 persons in the Register who keep dairies, 21 who have cowsheds, and 22 who keep milkstores or retail milkshops. In addition, 54 purveyors of milk are registered, of whom 18 bring in milk from outside the city. Fresh registrations were granted in the cases of 4 purveyors (2 from outside the city), 2 cowkeepers and purveyors in the city, and in respect to one milkstore. There were 3 transfers, viz., cowkeeper and purveyor 2, milkstore 1.

Five notices were served for breaches of the regulations ; two notices were sent in regard to limewashing of a cowshed and dairy respectively ; three notices were in respect to the unsatisfactory condition of the cowsheds, on account of paving, drainage, lighting and ventilation. Two notices are in abeyance pending the decision of the Town Council to purchase the site for a railway siding. Two cowsheds are in process of erection in the Whitecross and Tupsley districts; in the latter case, in the place of the cowshed in respect of which notice has been served.

During the months of May and October, a circular letter was sent to each cowkeeper and dairyman, drawing attention to the regulations requiring limewashing of cowsheds and dairies.

COMMON LODGING HOUSES.

There was one Registered Common Lodging House in the City at the end of the year, viz., 7, Little Berrington Street. This house was registered on December 21st, 1875, and has accommodation for 16 persons (males).

The Common Lodging House, 1 and 2, Turk's Alley, was demolished during the year. Reference is made under Housing.

Repairs were carried out in connection with a portion of the walls and floors at 7, Little Berrington Street.

HOUSING.

From particulars which follow, it will be seen that a considerable amount of property has been dealt with during the year.

Nineteen houses were demolished, viz., 3 to 10, Friars Street; 1 to 5, Cross Court, ; 1 and 2, Cross Street; 1 in 2 Court, Ross Road; 43, 44, and 77 St. Owen Street.

In addition, No. 1, Church Court; 31 to 35, Bewell Street; 37, St. Owen Street, and 1 to 7, Turk's Alley were also demolished after purchase by the Town Council for street improvements.

Rendered Fit for Habitation.

The following houses were rendered fit for habitation; in no case was it necessary to make a closing order:—2 in 1 Court, Ross Road; 3—5, 1 Court, Ross Road; 2 in 2 Court, Ross Road; 18—20 St. Martin Street; 1—3, Prospect Place; 43—45, Friars Street; 8, Inner Friars; 52, Berrington Street; 82—84, Widemarsh Street; 65 and 66, Bath Street; 6 and 7, Bedford Street; 23 and 24, Gaol Street; 24 and 25, Aubrey Street; 114, Ledbury Road; 128, 130, 132, 134, 136, 138, 140 and 142, Ledbury Road; 41—45, Eign Street; 2, Leicester Place, Church Street; 1 and 2, Rose Cottages, King's Acre; 6, Portfield Row; Cottages (2) Tupsley Pitch; Eign Cottage, Old Eign Hill; 49, Whitehorse Street, and 18 and 19, Millbrook Street.

Of these houses, 25, Aubrey Street ; 114, Ledbury Road ; 2, Leicester Place ; 6, Portfield Row, and 19, Millbrook Street, were dealt with under Sections 14 and 15, H. T.P., etc., Act, 1909.

CLOSED.

Eight houses were closed voluntarily, viz., 31 and 32, West Street, ; 1 and 2, Waterloo Court, Blue School Street ; 1 and 7, Powell's Court, Mill Street ; 2 and 12, Blue School Street.

Particulars in regard to number of inspections made is given in the table.

ACTION DURING 1911 UNDER THE HOUSING AND TOWN PLANNING, &C., ACT, 1909.

No. of Dwelling-houses inspected under and for the purposes of Sec. 17.	No. considered to be in a state so dangerous or injurious to health as to be unfit for human habitation.	No. of representations made to Local Authority with a view to the making of Closing Orders.	No. of Closing Orders made.	No. of Dwelling-houses the defects in which were remedied without the making of Closing Orders.	No. of Dwelling-houses which after the making of Closing Orders were put into a fit state for human habitation.	No. of demolition Orders made.	No. of Dweling-houses demolished.	No. of Dwelling-houses made in all respects reasonably fit for human habitation under Secs. 14 & 15.
58	1	(A) 11	(D) 0	46	(B) 4	0	(C) 19	5

(A) Of these, 10 houses were inspected in 1910.
(B) These were represented in 1910.
(C) Of these, 15 houses were demolished under Demolition Orders made in 1910, and 4 were demolished without Orders being made.
(D) Eight under repair. Closing orders made in regard to three in 1911.

The defects in connection with the houses included dirty and damp ground floors and walls, general dilapidation of interior and exterior, insufficient ventilation through windows not being constructed to open, and general insanitary surroundings.

Six " back to back " houses were converted into through houses. The houses were renovated and water closet and scullery accommodation provided. The yard in front of the houses was also concreted.

The end houses in Nos. 1 and 2 Courts, Ross Road, were demolished, in order to provide additional light and ventilation to the houses Nos. 1—5 Ross Road, and also the adjoining house in each of the Courts. Wash-house and water-closet accommodation were also provided for Nos. 1 and 2, Ross Road, and a wash-house in No. 2 Court for Nos. 3, 4, and 5, Ross Road.

In March, 1910, I represented Nos. 37, St. Owen Street, 3 to 7, Turk's Alley, and 38 to 41, St. Owen Street, as unfit for habitation ; Nos. 1 and 2, Turk's Alley, used as a Common Lodging House, had been rebuilt in 1903, and was not considered unfit for habitation. Closing Orders were made and complied with, and Nos. 38 to 41 and 42 St. Owen Street were demolished by the owners in the latter part of 1910.

Negotiations were later entered into by the Town Council with the owners of this property, and 37, St. Owen Street and Turk's Alley, for the purchase of the latter property and the site occupied by the houses, and also a portion of the land belonging to the owner of the adjacent houses in St. Owen Street. The negotiations occupied a considerable amount of time on the part of the Housing and Roads Committees. On February 16th a Local Government Board enquiry was held in reference to the granting of a loan to the Town Council for the purchase of the houses Nos. 37, St. Owen Street, and 1 to 7, Turk's Alley, together with the site occupying 430 square yards, an adjoining strip of land comprising 463 square yards, in St. Owen Street, and 28 square yards of land belonging to a third owner. It was explained at the enquiry that it was the intention of the Town Council to make a road adjoining the St. Owen's open space (old Parochial Burial Ground).

The loan was granted and the houses referred to have since been demolished and a road 30 feet wide constructed. This road gives access to the gravel pit adjoining Portfield House, belonging to the Corporation, and also to the houses in Belle Vue Place. Four houses have now been erected in St. Owen Street, and houses are in process of erection in the new street. A great improvement has thus been effected, and a slum removed from the main approach to one of the chief residential parts of the City.

Particulars of work carried out under the Housing Acts since the appointment of the Housing Acts Committee in January, 1907, to December 31st, 1911 :—

Inhabited Houses Demolished.	Uninhabited Houses Demolished.	Houses represented as unfit for habitation and awaiting demolition.	Inhabited houses closed and remaining void or used for other purposes.	Houses rendered fit for human habitation.	Houses at which renovations are in progress or which are about to be renovated.
72	20	8	13	109	27

ADEQUACY OF HOUSES, CLEANLINESS, &c.

A Memorandum to Medical Officers of Health on the preparation of their Annual Reports for 1911 issued by the chief Medical Officer to the Local Government Board contains the following :—

" The report as to housing should comprise also a statement as to adequacy of houses for artisans and labourers, in relation to the chief occupations in the district, as to the prevalence of overcrowding in the district, the sufficiency of open space about houses, and cleanliness of surroundings. Also as to supervision over erection of new houses."

At their meeting held on Oct. 17th, 1911, the Housing Acts Committee instructed me to obtain " all available information of the need for the erection of further cottages in the City, together with the number of inhabited cottages demolished to date, and the number of new cottages erected to date in the City."

The information was completed up to Dec. 17th, 1911. A list was compiled containing the names and addresses of the tenants of houses, which had been either demolished or closed since January, 1907. In the report particulars are given in respect to rent, number of occupants, &c. The information was obtained from various sources, and entailed a good deal of work by the Sanitary Inspector and myself. The particulars are as follows :—

Houses Demolished and Closed.

The total number of houses demolished since January, 1907, is 78 ; in addition 12 inhabited houses have been closed and either remain void or are used for other purposes, and 13 are awaiting demolition.

Rents of Houses in Shillings per Week.

	2-3.	3-4.	4-5.	5-6.	6-7.	*Total.*
Houses demolished or closed...	34	13	9	5	0	61
Houses into which displaced tenants have moved	5	23	16	*16	1	61

**In two cases also rates.*

In the 61 cases referred to above it has been possible to make a comparison between the rents of the houses closed or demolished, and the houses into which displaced tenants have moved.

The following are the particulars in regard to the remaining houses :—

The occupants of a Public House removed to a house at a rental of 3s. 3d. per week. Eight houses were occupied as furnished lodgings, and seven were Common Lodging Houses ; a good many of the persons who resided in these houses were of the vagrant class and have now left the town, and others have not been traced. A woman was removed to the Workhouse.

The occupants of 10 houses went into lodgings. They included three families, two of which were traced and no overcrowding was found ; of the remainder, three were male adults, three female adults, and there was also a married couple.

Four persons have left the City (two families who resided in houses for a time have also left the City), and the occupants of seven houses have not been traced. Two houses were not occupied, and two houses have been rebuilt and re-occupied.

Number of Rooms and Occupants of the Houses into which the Tenants have Moved.

Generally it may be said that the accommodation of the houses to which displaced tenants have moved is better than the accommodation in the houses vacated. The majority of the houses contain two living-rooms and two bed-rooms. In 46 cases special investigations have been made, and particulars ascertained are as follows :—

Period.	*Number of Persons per House.*											
	1	2	3	4	5	6	7	8	9	10	11	12
1907 to 1911 ..	4	5	3	7	5	13	2	3	2	0	0	2

In the majority (37 cases) the number of persons was six or under, and in half there were five persons or under.

Bedrooms.

In 9 cases there was 1 bedroom.
In 24 cases there were 2 bedrooms.
In 5 cases there were 3 bedrooms.
In 6 cases there were 4 bedrooms.
In 2 cases there were 7 bedrooms.

The majority of the houses contained two or more bedrooms, and one half of the houses two bedrooms.

Where there were only one or two persons in a house these were adults. There were generally two adults and several children. In six houses there were four children ; in three houses, five ; in two, six ; in two, seven ; and in two, eight children. In several houses there were lodgers.

It can be stated generally that there is no overcrowding, although in some cases an extra bedroom would be an advantage. Almost without exception the houses were occupied by one family only.

Occupation.

In the majority of cases the occupation was ascertained, and the particulars obtained are as follows :—

Males.—Eighteen were employed as labourers (farm, 5 ; bricklayers, 4 ; general work, 2 ; saw mills, 2 ; brickworks, 1 ; tileworks, 1 ; plasterer, 1 ; skin yard, 1 ; and cider works, 1). Five were employed as porters, three as ostlers, two were drovers and two followed the occupation of hawker. Two persons were employed as marine store dealers, and one was a rag and bone dealer; two were fruit and potato salesmen, two painters, and two poultry dealers. The occupation of the remainder was various, *e.g.*, gardener, County Court bailiff, sweep, coal carter, cab driver, engine driver, bill poster, boot repairer, agent, huckster, horse-breaker, greengrocer, bricklayer and baker. Two males, owing to ill-health, are unable to work.

Females.—Two were charwomen, one was engaged at dress-making and another person let lodgings.

The majority of persons were employed in casual work. Enquiry shows that the average wage all the year round would not, in most cases, exceed 15s. or 16s. per week; even when work is good the remuneration does not exceed 18s. per week. A small percentage earn £1 a week or over.

From enquiries which I have made both at the homes of these persons and in other cases where children have been sent to school with defective clothing, I think there can be no doubt that far too many persons in this town are employed in casual work. There is not sufficient work of this class to go round; the consequence is that a number of persons for several months in the year have great difficulty in either paying their rent or providing sufficient food for their family.

Social Habits.

While the majority of the displaced tenants are temperate, a definite history of intemperance was found in eight cases; in other cases persons are only fairly temperate. In a good many cases there is need for improvement both in regard to cleanliness of house and person.

New Houses Erected.

The new cottages built since January, 1907, number 145 (information obtained from the City Surveyor).

The following are the weekly rentals of 58 of the houses (two are in course of erection):—

3/- to 4/-	4/- to 5/-	5/- to 6/-	6/- to 7/-	7/- to 8/-	8/- to 9/-
2 @ 3/6	3 @ 4/10	7 @ 5/- 3 @ 5/2 6 @ 5/6 1 @ 5/- and rates	5 @ 6/- 2 @ 6/6 11 @ 6/- and rates	3 @ 7/- 10 @ 7/- & rates 1 @ 7/6	4 @ 8/- to 9/-
2	3	17	18	14	4

The following are the weekly rentals of the remaining 85 houses erected in the Garden City during the three years 1909 to 1911 :—

4/- to 5/-	5/- to 6/-	6/- to 7/-	7/- to 8/-
32 @ 4/9	2 @ 5/- 4 @ 5/3 16 @ 5/6 13 @ 5/9	8 @ 6/- 2 @ 6/3	8 @ 7/6
32	35	10	8

The above investigation appears to show that persons who have been displaced through the demolition or closing of houses during the last five years have found accommodation elsewhere, and on the whole there has been a moving up into houses of a higher rental. There is no overcrowding at present through insufficiency of houses. The investigation also shows that there is insufficient work for those employed in casual labour, and this also applies to a certain extent to skilled labour. Owing to the insufficiency of labourers' cottages in the rural districts of Herefordshire, labourers come to the town on account of better housing facilities in spite of the fact, that there is insufficient employment for artisans and labourers, who already reside in the City.*

Very little has been done in the past in regard to housing in the rural districts.

OPEN SPACE.—The majority of houses occupied by the working classes in this City have plenty of open space around, and a large number have a back garden. The occupiers of houses in the Garden City are especially fortunate in having a large amount of open space about their houses.

NEW HOUSES ERECTED.

The number of houses built in each Ward during the year 1911 was as follows :—

Ledbury Ward.	*Leominster Ward.*	*Monmouth Ward.*
13	31	6

The number of houses erected in the town since 1900 is shown in the accompanying table, for which I am indebted to the City Surveyor.

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* The Report was under consideration by the Housing Committee at the end of the year.

Date.		New Houses for which Plans have been approved.	Other Buildings.	New Houses completed and inspected.	Other Buildings.
During the Year	1901	79	6	43	7
,, ,,	1902	78	6	36	6
,, ,,	1903	50	12	65	11
,, ,,	1904	51	16	50	8
,, ,,	1905	69	5	38	4
,, ,,	1906	78	14	72	14
,, ,,	1907	50	20	60	14
,, ,,	1908	45	32	15	23
,, ,,	1909	81	7	71	5
,, ,,	1910	79	2	72	4
,, ,,	1911	49	12	50	15

INSPECTION OF NEW BUILDINGS.

The plans of all new houses are submitted to the Roads and Buildings Committee, and no buildings are erected until the plans are approved and passed by this Committee.

All new buildings are supervised by a Building Inspector, under the direction of the City Surveyor. The City Bye-laws provide for a proper system of drainage, including intercepting chamber and inlet and outlet ventilation in connection with the system. The drainage system is examined by the water test, and no houses are allowed to be occupied until the bye-laws have been complied with.

There are two sets of bye-laws in force ; in 1909 special Bye-laws were approved for the suburban part of the City.

The division between the urban and suburban areas is as follows :

(1) On the West, North and East, by the inner boundary of the following railway lines :—

(*a*) The part of the line from Newport and Abergavenny to Hereford between the northern end of the Hunderton Railway Bridge and the " Brecon Curve."

(*b*) The " Brecon Curve."

(*c*) The parts of the lines from Shrewsbury to Hereford and from Hereford to Ross and Gloucester, between the " Brecon Curve " and " The Crozens," and

(2) On the South by a line running from "The Crozens" along the Row Ditch and the Southern Boundary of the Bartonsham Farm Buildings to the River Wye, and thence along the Northern Bank of the Wye to the Hunderton Railway Bridge.

Included in the suburban area are the following districts:—Whitecross, Huntington, Westfields, Holmer, Aylstone Hill, Tupsley, Hampton Park, St. Martin's and Broomy Hill, also a portion of Breinton.

The suburban area outside the boundary referred to above covers an area of 4,583 acres, and the estimated population at the 1901 census was 9,676; the urban area within the boundary occupies an area of 448 acres, and the estimated population at the 1901 census was 11,706. Thus although the urban area is one-tenth of the suburban area, the population is greater.

The suburban bye-laws allow greater latitude in regard to buildings than the old bye-laws. Every person who erects a new building must construct every wall of good bricks or stone properly boarded and solidly put together.

(i) With good mortar compounded of good lime and clean sharp sand, or other suitable material; or

(ii) With good cement; or

(iii) With good cement mixed with clean sharp sand. Provided that such person may construct any external wall of such building as a hollow wall under certain conditions laid down.

The suburban byelaws allow instead of brick or stone "other hard and suitable material properly and solidly put together," but not less than nine inches thick.

The above regulations allow of the walls of houses being of timber framing, or other hard and suitable material. The upper portions of the houses in the Garden City are constructed of rough cement cast.

The suburban bye-laws also increase the extent of open space at the rear of buildings from 150 to 500 square feet.

There are other regulations which apply to sanitary conveniences.

Under the Towns Improvement Clause Act 1847, every new street being a carriage road must be at least 30 feet wide; and, if not a carriage road, at least 20 feet wide.

FACTORIES AND WORKSHOPS.

In the Annual Report for 1909, full particulars were given in regard to the work carried out in the various workshops. In the Report, which is required by the Home Office, an account of the inspections made during the year is given.

The 19 notices served, requiring contraventions of the Act to be remedied, had reference to the following :—

Workshops requiring cleansing	10
Bakehouses ,, ,, ...	4
Restaurant kitchens ,, ...	1
Dirty water-closets ,, ...	2
Insanitary urinals ,, ...	1
Unsuitable sanitary accommodation	1

Attention was called to the following defects by H.M. Inspector of Factories :—

Workshops requiring cleansing	1
Bakehouses ,, ,, ...	1
Waterclosets requiring limewashing	2
*Unsuitable sanitary accommodation	2
Insanitary urinals	1

*In one case the present accommodation is sanitary, but the premises do not admit of additional convenience being provided. In the other case the premises were void at the end of the year.

The following additional workshops are now in use :—Domestic 2, miscellaneous 3. Three more workplaces are now in use. There is one laundry less.

OUTWORKERS.

Visits were made to premises occupied by outworkers during the year. The rooms were on the whole satisfactory, and no notices were necessary in regard to lack of cleanliness. Under Section 110 six orders were issued in reference to two cases of Scarlet Fever, and one of Diphtheria in two houses.

REPORT FOR 1911.

Factories, Workshops, Workplaces, & Homework.

1.—INSPECTION.

(Including Inspections made by Sanitary Inspector.)

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries).	11	2	—
Workshops (Including Workshop Laundries).	140	16	—
Workplaces	77	1	—
Total	228	19	—

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
*Nuisances under the Public Health Acts :—**				
Want of cleanliness	13	4	—	—
Want of ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances	—	—	—	—
Sanitary accommodation: insufficient	—	—	—	—
Sanitary accommodation: unsuitable or defective	2	1	—	—
Sanitary accommodation: not separate for sexes	—	—	—	—
Offences under the Factory and Workshop Act :				
Illegal occupation of underground bakehouse (S. 101)	—	—	—	—
Breach of special sanitary requirements for bakehouses (SS. 97 to 100)	4	4	—	—
Other offences	—	—	—	—
Total	19	9	—	—

*Including those specified in Sections 2, 3, 7 and 8 of the Factory and Workhops Act as remediable under the Public Health Acts.

3.—HOME WORK.

OUTWORKERS' LISTS, SECTION 107.

NATURE OF WORK.	Lists received from Employers.						Notices served on Occupiers as to keeping or sending lists.	Outwork in Infected Premises, Sections 109, 110.		Inspections of Outworkers' premises.
	Twice in the year.			Once in the year.						
		Outworkers. †			Outworkers.					
	Lists.†	Contr'c'rs	Workmen.	Lists.	Contr'c'rs	Workmen.		Instances.	Orders made (s. 110)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(14)	(15)	
Wearing Apparel—										
(1) making, &c. ..	40	—	141	—	—	—	63	2	6	74
(2) cleaning and washing										
Lace, lace curtains and nets										
Artificial flowers										
Nets, other than wire nets										
Tents										
Sacks	2	—	4	—	—	—	2	—	—	2
Furniture and upholstery	4	—	10	—	—	—	8	—	—	2
Total..........	46	—	155	—	—	—	73	2	6	78

† The figures given in columns 2, 3, and 4 are the *total* number of lists (received from employers who sent them both in February and August as requred by the Act), and of the entries of names of outworkers in those lists.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year. (1)	Number (2)
Workshops, Bakehouses	25
,, Domestic	9
,, Laundries	2
,, Miscellaneous	139
Workplaces	45
Total Number of Workshops on Register	220

5.—OTHER MATTERS.

Class (1)	Number (2)
Matters Notified to H. M. Inspector of Factories —	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	—
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) .... Notified by H.M. Inspector	6
Reports (of action taken) sent to H.M. Inspector..	1
Other	—
Underground Bakehouses (s. 101):—	
Certificates granted during the year	—
In use at the end of the year	2

SLAUGHTER HOUSES.

In the Annual Report for 1908, page 78, a description was given of the Public Abattoir and Lairages. There are two private slaughter-houses in the City, and these are visited periodically. In one case, a notice was sent in regard to contravention of the Bye-laws by keeping a dog in the slaughterhouse.

The following table shows the number of animals slaughtered in the public abattoir each month during the year :—

1911	Beeves.	Calves.	Sheep.	Lambs.	Pigs (Pork).	Pigs (Bacon).	Total.
January	101	7	475	—	149	86	818
February	104	10	470	—	129	64	777
March	103	34	500	2	105	61	805
April	134	65	615	101	114	49	1078
May	99	49	480	217	63	16	924
June	96	56	417	352	26	—	947
July	107	57	508	475	20	—	1167
August	83	38	449	383	25	—	978
September	124	27	513	375	177	11	1227
October	105	13	630	—	166	84	998
November	114	10	584	—	176	113	997
December	145	7	536	—	225	138	1051
Total.........	1315	373	6177	1905	1375	622	11767

There was an increase of 232 in the number of animals slaughtered, compared with last year ; the increase comprised 189 lambs, 234 pork pigs, and 123 bacon pigs, and the decrease 16 beeves, 37 calves, and 161 sheep.

The total number of animals slaughtered was 11,767, compared with an average of 10,777 for the five years 1906 to 1910.

Diseased Carcases.—The following diseased conditions, &c., were found in animals slaughtered at the Public Abattoir during the year :—

Sheep—

Congested and ill-bled	2
Septic metritis	1
Parasitic disease of liver and lungs	1
,, ,, pleura and lung	1
,, ,, liver	2
Septic peritonitis	2
Pneumonia and Pleurisy	1
Cancer of liver	1
Total	11

Pigs—

Bruising of head	1
Congested and ill-bled	1
Pleurisy and Pneumonia	2
Tuberculosis	4
Abscess of lung and Pleurisy	1
Peritonitis	1
Parasitic disease of liver	2
Hydated cysts of liver	4
Total	16

Cows—

Tuberculosis (general)	1
Left pyo-nephrosis	1
Abscesses of liver	1

Bull—

Tuberculosis (general)	1
Total	4

Where Tuberculosis was found, in each case the whole carcase was condemned.

The portion of a sheep, viz., left leg, both shoulders, and left breast was destroyed, on account of bruising; the liver of a sheep was destroyed on account of flukes. In the latter case the liver was taken to the Police Station; the rest of the carcase was quite healthy, and the condition of the liver was not noticed until it was sliced. The bruised sheep had been taken to a stable from the Cattle Market, and was examined there.

Either a portion or the whole of the carcase was surrendered, according to the condition found; in all over 21 cwt. 58 lbs. were burnt at the destructor.

Unsound Food.—No other unsound food was condemned during the year.

SALE OF FOOD AND DRUGS ACT.

In the following report, Mr. Protheroe, as Inspector under the Acts, states the number of articles submitted by him to the Public Analyst during 1911. The results of the analysis have already appeared in the quarterly reports of the City Analyst.

Articles.	Number Purchased.		Number Genuine.		Number Adulterated.	
	Formal	In formal	Formal	In-formal	Formal	In-formal
Milk	11	4	11	3	—	1
Skimmed Milk	1	—	1	—	—	—
Butter	—	15	—	14	—	1
Cheese	—	8	—	8	—	—
Rice	—	6	—	6	—	—
Pepper	—	5	—	5	—	—
Mustard	—	5	—	5	—	—
Coffee	—	5	—	5	—	—
Vinegar	1	3	1	3	—	—
Corn Flour	—	1	—	1	—	—
Treacle	—	1	—	1	—	—
Cider	—	3	—	3	—	—
Whiskey	—	2	—	2	—	—
	13	58	13	56	—	2
Total	71		69		2	

Observations.

Milk.—Of the 15 samples of Milk, 4 were certified to be "genuine and of good quality," 9 as "genuine," 1 as "genuine though the fat was reduced to the limit of the Board of Agriculture," and one as "deficient of upwards of 20 per cent. of its fat." The latter was an "informal" sample, and "formal" samples taken afterwards were certified to be genuine. Of the 11 "formal" samples, 7 were purchased in the streets, and 4 at shops. Of the 4 "informal" samples, 2 were purchased in the street and 2 at shops.

Skimmed Milk.—This was free from water and was ordinary skimmed milk.

Butter.—One "informal" sample of butter was slightly adulterated, containing 2.4 per cent. of water in excess.

Rice.—Of the 6 samples of Rice, one was "unfaced," four contained a quantity of mineral matter below that suggested as a limit by the Local Government Board, and in one the limit of added mineral matter was exactly reached, *i.e.*, 0.5 per cent.

Cider.—The three samples of Cider were certified to be free from lead and other metallic contamination, and the general results showed that they were of good quality and contained no added water.

It will be seen that further formal samples taken in one case, where an 'informal' sample of milk was found to be adulterated, were found to be genuine and no further action was necessary.

The freedom from adulteration of the articles examined is very satisfactory.

In accordance with the desire of the Board of Agriculture, the majority of the samples taken, 58, were 'informal.'

There has been no necessity for action on account of breaches of the Margarine Act, 1887, and the Butter and Margarine Act, 1907. No action has been taken under Acts other than the Sale of Food and Drugs Acts.

FOOD PREPARING PLACES.

Reference is made to restaurants and restaurant kitchens under the Factory and Workshop Act and to other premises under "Offensive Trades." During the year visits were made to premises where sausages, blackpuddings, etc. are made. Sausages are made on 19 butchers' premises; in some cases blackpuddings and brawn are also made. In two cases the rooms were underground and at these premises two drains were improperly trapped and the walls and floors defective; the defects have now been remedied. At a third place the floor has been re-laid. On the whole the premises were kept clean.

Fried fish shops and ice cream places have also been visited during the year and the sanitary conditions were on the whole satisfactory. There are 9 fried-fish shops; there was an accumulation of fish refuse at one of the premises and a notice was sent in regard to its removal.

OFFENSIVE TRADES.

There are the following offensive trades in the town :—

Gut-scraping business, 1; hide and skin receiving depots, 2; tripe boiling places, 8.

Frequent visits have been made to these places during the year, and particular attention paid in regard to cleanliness and proper storage and removal of trade refuse.

OTHER PREMISES.

Marine Stores and other premises have also been inspected.

WATER SUPPLY.

In my annual report for 1910, I described on pages 46 and 47 the scheme which was adapted by the Town Council, which provided for two additional sand filter beds. The two new beds will cover an area of 20,000 square feet each. Both beds have been completed and at the end of the year, a portion of the filtering material had been placed in one bed.

During part of October and November, and practically the whole of December, coagulant was added to the water in the rising main in a strength of ½ grain to 1½ grains per gallon. On several occasions during this period I examined tap water for lead, but was unable to find the slightest trace, moreover the water was always found to be alkaline. The water was also in contact with lead and the action was practically nil after a few days, and only a very slight trace was evident after a week's contact.

District Supplied by Well Water.—A certain number of houses obtain their water supply from wells, the particulars are as follows :—

	Houses.	*Wells.*
Hunderton & District	18	10
Putson & Bullingham	21	12
Grafton & Red Hill	7	6
Westfields	13	8
Whitecross, Huntington & Kings Acre	19	13
Canon Moor	4	2
Breinton	2	2
Tupsley, Hampton Park & Franchistone	9	7
Aylestone Hill	10	6
Holmer	14	11
Totals.	117	77

Water Analysis.—During the year I made chemical analyses of 33 samples of well-water from 31 wells ; 10 were taken in the Tupsley District, 15 in Hunderton, 4 in Westfields and 4 in other districts. A sample of well-water was also submitted to the City Analyst and the results of the analysis confirmed the contamination, which I had previously found in two analyses taken at different times from the same well.

In three cases on account of the water being contaminated, the town water was laid on and eight houses connected. In one instance the work was done by the Corporation after the owner refused to comply with the notice served under Section 62, Public Health Act, 1875. In two cases wells were cleaned out on account of the water being of suspicious quality and in several cases further samples are to be taken. The town water supply has been laid on to four other houses in connection with the conversion of earth-closets into waterclosets and the connecting of the premises with the public sewer.

SCAVENGING.

At a meeting of the Town Council held in January, 1910, it was decided that in future owners should be required to provide in respect of each house (under Section 36, P. H. A., 1875), an ash pit, but that an intimation should be sent that provision of a regulation ash-bin with a proper covering would be deemed by the Council suitable appliance under the Act. A notice is now sent to the owner as soon as plans for new houses have been approved by the roads Committee. The provision of a bin saves the owner some pounds and should therefore be supplied willingly.

At the February meeting of the Council in 1910, it was resolved that the Council require occupiers of private houses and business premises to provide suitable receptacles with adequate and proper lids or coverings. In May, 1910 a large number of notices were sent out signed by the City Surveyor, giving particulars in regard to the time of collection of refuse and suggesting galvanized bins with suitable lids as the most convenient and sanitary form of receptacle for storing refuse between the visits of the scavengers. A large number of persons still use old buckets, tins, boxes, etc. as receptacles, without any covering. A bin can be purchased for a few shillings.

In a memorandum issued by the Local Government Board in August, in connection with the prevalence of Summer Diarrhœa, the importance of efficient scavenging was pointed out. It was even suggested that during the hot weather, house refuse should be removed daily. It would be a distinct advantage from a health point of view if refuse were removed twice weekly during the Summer months.

During the year 36.2 per cent. of the refuse collected was taken to the Destructor in covered carts and burnt. I am indebted to the City Surveyor for the following particulars :—

	Tons.
Refuse burnt	3990
Refuse tipped	7030
Total	11,020

In addition to the above, a large amount of animal and vegetable waste from shops of butchers, greengrocers, and fishmongers, also from slaughter-houses, was conveyed to the Destructor to be burnt.

Pollution of Rivers and Streams.—Inspection is being made from time to time of the banks of the River Wye with a view to detecting sources of pollution and where necessary, action has been taken. Application has been made to the Local Government by the Hay District Council for the necessary loan for purposes of treatment and disposal of the town sewage.

Yazor Brook.—Periodical inspections have been made during the year. Constant supervision of the system of sewage treatment at the Asylum is necessary, as there are over 500 persons in this Institution and the brook is only a small one. A portion of the brook (in the town) was cleaned out during the year.

SEWAGE DISPOSAL, Etc.

In the Annual Report for 1908, pages 86 and 87, and in the Report for 1909, pages 115, I gave an account of the sewerage, and methods of sewage disposal in this town.

Further reference may be made to the Annual Report for 1901. Webb's sewer-gas extractor and destructor lamp is used in connection with sewer ventilation. By means of this form of ventilation the ventilation of the sewers and the lighting of the streets can be carried out at the same time ; the ventilator is ornamental and has the appearance of an ordinary street lamp. There are now over 25 lamps in use in connection with 32 miles of sewers.

There are now four clinker beds in use and a fifth is in course of construction, clinker being added from time to time from the Destructor. The new bed will be about 2,160 square feet.

During the year I made chemical analyses of the effluents from the various beds and the combined effluent as it flowed into the river. The effluent is of very fair quality and has not caused any nuisance. It would be an advantage if the effluent were better ærated, and this will be able to carried out when the fifth bed is completed. The recent Royal Commission on Sewage Disposal suggest two hours contact and four hours rest for contact beds ; the periods of contact and rest following in cycles. It is important that the liquid should be fairly evenly distributed over the surface of the beds and this can best be affected by means of an automatic sprinkler.

Other Methods of Excremental Disposal :—The Old Eign Hill District has been sewered at a cost of £214. Since the sewering of the district in May, 16 out of the 36 houses in this area have been connected up and the privies and earth closets converted into water closets. At three houses the work was in progress at the end of the year, and the owner of another house had given instructions for the work to be proceeded with. It is hoped that the remaining five properties comprising 16 houses will shortly be connected, in which case no formal notices will be necessary. There can be no doubt from a health point of view, that the sewering of the district will be of great benefit to the inhabitants.

Visits were made to the Hunderton District, and the cesspools, privies and earth-closets examined. In only a few cases was any notice necessary in regard to cesspools improperly constructed or overflowing ; the majority are at the end of the gardens at some distance from the houses. Reference to the taking of samples of well water has already been made ; in two cases where the water was contaminated, the town water supply has been laid on. There are still 10 wells supplying 18 houses, but on account of the cesspools being some distance away, the water is not likely to become polluted. The Westfields district is only partly sewered and there are outlying parts of the town such as Holmer, King's Acre, Tupsley, and beyond Aylestone Hill, which are not connected to the sewers, being outside the present drainage area.

The following list shows the approximate number of privies and earth closets in the town :—

	Privies	*Earth Closets.*
Hunderton	6	31
Breinton	4	2
Grafton & Red Hill	3	—
Upper Bullingham	5	—
Putson	7	3
Tupsley	15	16
Aylestone Hill	2	8
Canon Moor	—	3
King's Acre & Huntington	12	8
Westfields	9	46
Holmer	8	5

NUISANCES, INCLUDING DRAINAGE DEFECTS.

WORK DONE THROUGH THE SANITARY INSPECTOR.

DRAINAGE—

Obstructed drains opened and cleansed	64
Defective drainage repaired or relaid	142
Houses with insufficient drainage, extra provided	18
Houses connected to public sewer	19
Glazed stoneware gullies fixed	154
Drains removed from inside or underneath houses	8
Sewer interceptors fixed	32
Disconnecting and inspection chambers constructed	77
Inspection chambers repaired	18
Ventilating shafts fixed or repaired	40
Cesspools cleansed out or repaired	3
Cesspools abolished	4

WATER CLOSETS, PRIVIES, AND URINALS—

Obstructed w.c.'s opened and cleansed	22
Dilapidated w.c.'s repaired or rebuilt	85
New "Washdown" basins fixed	21
Pedestal basins fixed	63
Soil-pipes removed from inside houses	2
Soil-pipes repaired or renewed	14
Ventilation provided to w.c. compartments	5
Insufficient accommodation, extra w.c.'s, or earth-closets erected	11
Water supply provided to w.c.'s	24
Flushing apparatus repaired or new provided	110
Filthy closets limewashed	24
Privies converted into water or earth-closets	7
Earth closets converted into water-closets	5
Privies cleaned out and abolished	7
Urinals constructed	—
Urinals repaired and limewashed	3

DWELLING HOUSES, &c.

Filthy and dilapidated houses cleaned and repaired	57
Damp courses inserted	6
Houses closed as unfit for habitation	8
Pantries or food cupboards provided	13
Houses stripped and cleansed after infection	6
Schools disinfected or cleansed	—
Roofs repaired	71
Chimneys raised or repaired	34
Floors relaid or repaired	61
Dangerous stairs and defective windows repaired	93
Dangerous cellar windows repaired	1
Cases of overcrowding abated	4
Dilapidated wash-houses repaired or rebuilt	35
Filthy wash-houses limewashed	17
Filthy cellars or passages limewashed	5
Stagnant water removed from cellars	13
Yards and passages paved or paving relaid	58
Water supply provided to houses	23
Dangerous disused wells filled up	2
Polluted wells closed	4
Wells cleaned out or repaired	2

SINKS, WASTE-PIPES, AND SPOUTING—

Dilapidated sinks repaired	15
New glazed stoneware sinks fixed	38
Waste-pipes provided to sinks	42
Waste and rain-water pipes disconnected from drains	78
Spouting repaired or provided	117

KEEPING OF ANIMALS AND MANURE—

Stables paved and drained	1
Floors of cowsheds relaid	–
Cowsheds repaired	–
Light and ventilation provided to cowsheds	–
Water supply laid on to cowsheds	–
Nuisances from animals improperly kept, abated	14
Accumulation of manure and refuse removed	65
Manure pits repaired or provided	–

MISCELLANEOUS—

Dairies and cowsheds limewashed on notice	44
Bakehouses ,,	4
Bakehouses repaired	–
Slaughter-houses ,,	–
Workshops ,,	4
Common Lodging-houses ,,	–
Overcrowding of workshops, abated	–
Workshops ventilated	–
Bakehouse floors scraped and cleansed	–
Miscellaneous nuisances abated	66

An account of drainage and other work necessary to abate nuisances, which has been carried out under the supervision of the Sanitary Inspector, is shown in detail in the preceding table. The following table shows the number of notices served and those complied with during the year :—

Statute or Bye-Law.	Notices not complied with at end of 1910.	Notices served 1911.		Complied with 1911.	Notices not complied with at end of 1911.
		Preliminary.	Statutory.		
Public Health Acts	87	476	32	473	122
Factory and Workshop Act	3	19	6	19	9
Housing of the Working Classes Acts	3	7	1	10	1
Infectious Disease (Prevention) Act	—	—	6	6	—
Regulations under Dairies, Cowsheds, and Milkshops Order	—	44	—	44	—
City Byelaws	—	7	—	6	1
Total	93	553	45	558	133

There were 133 notices still not complied with at the end of 1911.

In addition to the above notices, 249 letters were written by the Inspector and 89 reports made to the City Surveyor.

There were 230 complaints investigated and 91 drains tested (by water 69, smoke 22). It will be seen by the table on page 67 that a large number of visits were paid to bake-houses, workshops, &c. During the year, G. H. Williams, in addition to carrying out the clerical work of the Health Department, has also assisted in outdoor sanitary work. Particulars of the visits are as follows :—

	S. Protheroe.	*G. H. Williams.*
Nuisances	740	399
Work in progress	1000	43
House to House Inspection	37	—
Housing Acts	168	40
Infectious Disease	53	82
Factory and Workshop Act	107	90
Bakehouses	17	39
Common Lodging Houses	4	8
Dairies, Cowsheds and Milkshops .	53	51
Slaughterhouses	91	—
Food Preparing Places	32	2
Stables and Piggeries	106	143
Offensive Trades	20	—
Miscellaneous	144	25
Total	2572	922

It is satisfactory to note that in only one case ~~was~~ were legal proceedings necessary :—

(1) Proceedings were taken in May on account of failure to comply with notice served upon an occupier to abate a nuisance arising from the premises being in such a state as to be a nuisance. The notice having been complied with before the date of the hearing, an Order was made prohibiting a recurrence of the nuisance and to pay the costs.

In company with the Sanitary Inspector I visited the whole of the caravans used for habitation at the time of the May Fair, the sleeping and living rooms were on the whole satisfactory, and no cases of infectious disease were detected.

HOUSE TO HOUSE INSPECTION.

Systematic inspections in connection with the following houses have been made during the year :—

41 to 45, Eign Street.
128 to 142, Ledbury Road.
6 and 7, Bedford Street.
65 and 66, Bath Street.
1 to 3, Prospect Place.
18 to 20, Saint Martin Street.
39 to 44, Gaol Street.
29 to 32, Whitecross Road.
1 to 4, Greyhound Court.

Particulars in regard to the Adoptive Acts in this City are given on page 122, Annual Report for 1909.

CITY OF HEREFORD.

FOURTH ANNUAL REPORT to the Education Committee.

To the Chairman and Members of the Education Committee,
City of Hereford.

Ladies and Gentlemen,

I have the honour to submit for your consideration a Report for the year 1911, on the Sanitary condition of the Elementary Schools of the town and the Medical Inspection of school children.

I have proceeded on the lines indicated by the Board of Education in Circular 596.

Sanitary Condition of the Schools.

(*a*) " *General review of the hygienic conditions prevalent in the Schools in the area of the Local Education Authority in respect of such matters as surroundings, ventilation, lighting, warming, equipment and sanitation, including observations on the type and condition of sanitary conveniences and lavatories, water supply for washing and drinking purposes, the cleanliness of schoolrooms and cloakrooms, arrangements for drying children's cloaks and boots, and the relation of the general arrangements of the school with the health of the children.*"

During 1909 and 1910 I submitted reports on the whole of the elementary schools in the town, and in the table on page 41, Annual Report for 1910, a short summary of some of the conditions was given.

NEW ADDITIONS AND ALTERATIONS, Etc.

The following alterations etc. have been carried out :—

Holmer Mixed School :—Classroom No 1 has been extended on the north side a distance of approximately 11 feet. The room is now 25 feet long and 18 feet broad ; the floor space is 450 sq. feet and there is accommodation for 45 boys.

The lighting is now by means of three windows on the north side, (two of 8 panes, area 22 sq. feet and the middle one of 10 panes, area 24 sq. feet), two windows on the East side (a new window of 6 panes, area 14 sq. feet and a small swivel window near the roof of an area of 5½ sq. feet). Total lighting area 87 sq. feet, equal to one-fifth of the floor space.

The upper four panes of the two North windows open on the swivel and two of the lower panes on the hopper principle ; in the middle window the two upper panes open as swivel and the lower four as hopper windows. In each case about ¾ of the window opens. Two of the upper panes of the East window open on the swivel principle and the two lower as hoppers.

The lighting and ventilation in this room is now satisfactory.

The room is heated by a fireplace, as formerly, at the South end. The new portion of the walls has been colour-washed (light green) and the dado painted.

The whole of the boy's conveniences and urinal have been pulled down and new pedestal through closets (five in number) with an automatic flush, have been erected at the S.W. corner of the playground 75 feet from the nearest window. A urinal 20 feet long of glazed slabs has been constructed with proper flushing apparatus.

Roman Catholic Schools.—The walls were coloured in both schools, and some painting done in the mixed school.

In the Infants' Department the folding glass partition has been moved, so as to divide the school into two classrooms, each 18 feet wide, and 20 feet 6 ins. and 23 feet 5 ins long, respectively. There is thus accommodation for 41 children in one room, and 46 in the other.

Scudamore Schools.—The alterations necessary in connection with these schools are under the consideration of the Education Committee.

St. Peter's Council School.—The ventilation in the Central Hall has been improved ; a new sash window of an area of 20 sq. feet has been placed in the east wall (upper part) About one third of the two small windows (each 10 sq. feet) at the upper part of the east wall opened on the hopper principle, now the whole of the upper and lower portions of these windows open on the swivel principle.

Classroom No. 5 has been divided by a glass-panelled folding partition into two parts, each 20 feet 4 inches and 14 feet 10 inches long and 17 feet 3 inches broad. The accommodation is 35 in the larger room and 26 in the other room.

St. Owen's Council.—The outer gratings of all the inlet ventilators were removed and the ventilators cleaned out. The pipe for flushing the urinal has now been extended along a portion 13 feet 2 inches not previously provided for.

Holmer Infants' School.—The inlet ventilators have all been cleaned out, by removing the outer gratings.

Tupsley School.—The window at the North East end of the main classroom has been replaced by one of plain glass and one of the panes opens on the hopper principle and is provided with side shields ; the light is now much better.

Two modern stoves have been placed in each of the classrooms ; these are of a square pattern with open grates and are provided with fresh air inlets. The outlet pipes pass into the chimneys of the fireplaces. As these stoves are several feet in front of the old fireplace, the heating is much more efficient, as with the old arrangement a large part of the heat passed up the chimney. The top of each stove is flat but does not provide for radiation, (see page 73). A horizontal pipe for flushing has been fixed to the boys' urinal ; I understand that a new urinal of glazed ware will be fixed shortly.

IMPROVEMENTS STILL NECESSARY.

On pages 56-61 and 63, Annual Report for 1910, I mentionep in what directions improvements were still necessary. I hope that these improvements will be carried out in the near future. Although St. James' Infants' is a comparitively new school, only the upper panes of the windows open on the hopper principle ; during the Summer months additional window ventilation is necessary. It will be seen from the table on page 72, that the heating in some of the schools is not satisfactory.

GENERAL REMARKS.

Ventilation.—I have already pointed out in previous reports that school rooms can be adequately ventilated by natural means, and that for this purpose reliance should be placed on window ventilation. Windows should be arranged so that they can be opened at all seasons of the year. At least a half and even two-thirds of the windows (with advantage) should be made to open.

A good combination is a middle sash window and upper and lower hoppers.

Upper swivel windows can be also used instead of hoppers. Hoppers allow the air to pass in an upward direction ; they should have side shields. Casement windows can also be used with upper or lower hoppers. Upper and lower hoppers can be used, but with hoppers alone it is more difficult to flush a room with air. If there is sufficient window ventilation Tobin's tubes and other forms of ventilator can be dispensed with, generally they only act as dust receptacles, and are never cleaned out.

During the Summer months as much air as possible is desirable, for this purpose it is an advantage to have one or more French windows which can be thrown wide open. During play hours, the class rooms should be thoroughly flushed with air.

During the cold weather hopper windows will be found useful, as draughts are felt from open casement windows.

HEATING.—In my last Annual Report I referred to the various methods of heating and suggested that the best method of heating classrooms was by a low pressure hot water system of pipes and radiators. I also mentioned how it was possible to have a boiler at the back of one of the fireplaces in connection with pipes and radiators ; by this combination there is the advantage of the open fire-place and also the pipes and radiators for heating distant parts of the same room and also other classrooms. It is an advantage to have open fire places also, especially in an Infants' School.

On page 64, Annual Report for 1910, I stated that there was an objection to the ordinary round stove of the "Tortoise" variety on account of the stove becoming over-heated and deleterious gases produced, and that there was not the same objection to the more modern type of radiating stoves, provided the ventilation of the class-room was efficient.

In the Building Regulations drawn up by the Board of Education in regard to the planning and fitting up of new buildings for elementary schools, there is a section devoted to Warming. It is suggested that the heat of the class-room should be moderate and evenly distributed, so as to maintain a temperature of from 56° to 60°. Where schools are wholly warmed by hot water, the principle of direct radiation is recommended. In such cases open fireplaces in addition are useful for extra warming on occasions, and their flues for ventilation always.

(*a*) 'A common stove, with a pipe through the wall or roof can under no circumstances be allowed. Stoves are only approved when :—

(i) provided with proper chimneys (as in the case of open fires) ;

(ii) of such a pattern that they cannot become red hot or otherwise contaminate the air ;

(iii) supplied with fresh air, direct from the outside, by a flue of not less than 72 inches superficial ; and

(iv) not of such a size or shape as to interfere with the floor space necessary for teaching purposes.'

TEMPERATURES IN DEGREES FAHRENHEIT.

SCHOOLS.	January		February		March		April		May		June		July		August		Sept.		October		November		December	
	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.	M.	A.
All Saints' (Infants)	45.6	54.7	48.1	57.3	48.3	57.3	51.7	58.3	61.3	66.9	62.7	69.3	69.5	76.8	70.6	77.6	59.1	64	56.5	62.6	*		*	
Blue Coat (Boys)	49.4	55.1	49.9	55.8	51.3	55.3	50.7	56.6	59.2	65.4	61.2	68.7	67.8	76.5	69.6	76.1	57.2	62.8	57.9	65.2	53.4	60.8	53.1	61.8
.. (Girls)			51.9	53.8	52.4	55.3	50.4	56.3	60	63.9	61.5	64.1	70.7	73.3	70.5	73.1	59.7	62	56.1	59.2	53.7	57.3	54.2	57.6
Holmer (Mixed)	45.6	51.8	46.3	52.2	47.2	53.2	48.4	54	59.9	66.9	61.1	67.1	68	75.4	68.8	75.6	57.1	61.6	53.7	59.1	50.1	55.9	48.6	54.4
,, (Infants)	48.2	56.7	49.8	59.2	49.6	59.1	51.6	59.8	58.5	68	61.2	68.4	66.2	76.4	67.4	75.5	56.4	63.8	53.7	63.9	51.8	58.3	50.5	58.1
Roman Catholic (Mixed)	57.5	58	58.9	59.7	58.2	59.7	57.7	60.3	61.6	66.4	62.2	67.9	68.3	76.4	69.5	76.8	58.9	63.4	57.7	60	57.5	59.3	57.6	58.9
,, ,, (Infants)	58.8	59.5	58.3	59	57.8	59.7	57.8	59.4	60.6	64.8	62.5	66.5	67.2	73.4	69.9	75	59.2	61.2	56.3	59.4	56.7	59.4	56.4	58.9
S. James' (Infants)	51	58.2	51.5	59.1	54.3	59.7	52.8	59.5	62.4	68.8	62.7	70.2	68.7	77.8	69.7	78.5	59.2	64.1	57.1	63.1	53.8	59.4	53.8	58.8
St. John's (Girls)	48.9	55.6	51.7	57.7	50.9	57.3	51.1	57.4	59.7	66.1	61.1	66.7	66.8	73.8	68.6	74.5	58.2	61.9	55.6	60.9	50.7	57	51.4	58.4
St. Martin's (Mixed and Infants)	46.8	51.7	49.8	54.6	46.7	51.5	50.4	54.1	58.3	64.6	60.6	66	67.3	75.3	69.7	78.2	58.1	62.3	52.7	59.5	49.9	56.2	49.8	56.5
St. Owen's (Boys)	47.7	53.7	49.4	55.6	48.6	55.6	54.2	59.6	58.9	65.1	60.3	65.3	65.9	73.7	67.8	74.5	58.2	62.3	56.3	61.6	54	58.4	53.3	57.6
St. Peter's (Girls)	49	56.5	50.6	57.7	50.9	58.1	51.7	58.4	59	66.9	60.9	67.8	66.5	75.7	68	76	58.7	63	55.4	60.9	52.5	57.7	52.5	58.4
Scudamore (Boys)	53.4	57.9	54.8	58.9	54.4	58.2	54.8	59.3	60.7	68.4	63.4	70.2	69.5	78.4	72.2	78.2	59.1	63.6	57.8	61.8	54.9	58.5	54.7	58.4
,, (Girls)	51.1	56.6	51.3	58	50.3	58	53	58.8	61.1	70.1	61.9	70.1	67.8	78.8	70.5	79.8	57.7	64.3	53.6	63.3	54.9	61.7	54.9	61.4
,, (Infants)	47.5	53.5	46.6	54.1	49.7	55.7	50.9	55.6	60.9	68.1	61.8	68.5	70.1	77.8	70.6	77.1	57.6	63.4	57.2	60.2	*		50.2	55
Tupsley (Mixed and Infants)	47.1	54.8	48.7	56	49.9	57.1	50.7	58.3	59.3	67.8	64.3	71.9	67.9	76.7	69.3	77.5	56.9	61.9	55.4	61.2	52.6	59.1	52.2	59.1

* Schools closed on account of measles.

† Morning temperatures at 9 a.m., and afternoon temperatures at 3 p.m.

What applies to new schools in regard to heating and ventilation obviously applies also to old buildings. The old fashioned "Tortoise" stove does not comply with the rules referred to above.

There are stoves made which are a combination of open fire place and stove combined ; these are placed in front of a fireplace, they are several feet in height and width, with a flat top, and are provided with an outlet pipe which passes to the chimney and an inlet pipe for fresh air. Some of these stoves are provided with a grating over the top through which air, heated after circulating around the stove, is radiated into the room. With this combination there is the advantage, over a fire, of more heat, and in addition there are not the disadvantages of the old-fashioned stove.

The table on page 72 shows the average morning and afternoon temperatures for the various schools for each month in the year. It is essential that the temperature of class-rooms should be at least 55° F., and anything below this cannot be considered satisfactory. During the months of January, February, March, April, November and December, in the majority of the schools the morning temperatures taken at 9 a.m. were not 55°, the exceptions being the Roman Catholic Mixed and Infants' Schools. At Scudamore Boys' School the temperature in February, March, April, November and December was nearly 55° ; and at Scudamore Girls' approximated to 55° in November and December. The schools in which the temperatures were under 50° F. in January, February and March were All Saints', Holmer Mixed, St. Martin's ; at St. Owens, the temperatures were below this point in January, and at Scudamore Infants' and Tupsley in January and February.

The afternoon temperatures were much better ; the schools in which the afternoon temperatures were below 55° F., during the Winter months were Blue Coat Girls' in February, Holmer Mixed, in January to April, St. Martin's in January, March, and April, St. Owen's in January, Scudamore Infants' in January and February. The schools where improvement in the heating is most needed are Holmer Mixed and St. Martin's.

Fires are not lighted sufficiently early in the morning. Even with a good system of heating by radiators and pipes, unless attention is paid to the stoking, the rooms are not sufficiently heated. More attention is necessary in connection with the stoking, there is no reason why a classroom should be below 55° at 9 a.m. In some cases fires and stoves are not lighted early enough during the winter months.

During last summer the weather was exceptionally hot, and it is therefore not surprising to notice that the temperatures in the classrooms during July and August were very high. Under usual conditions August is a hot month in Hereford, it is therefore important as I have already pointed out, that during the summer months as much air as possible should be allowed to circulate through the classrooms and this can only be done if the means of ventilation are efficient.

Outside blinds would be useful in some schools, as rooms which receive the full glare of the sun become very hot. It will be noticed that during August when the afternoon temperatures were in some cases even as high as 78°, the average temperature of the Blue Coat Girls' School was 73°,and this was owing largely to the excellent ventilation.

CLEANLINESS.—On the whole I found that the classrooms, cloakrooms and sanitary conveniences were kept clean, but in some cases there is room for improvement. Where playgrounds have not a hard surface, a good deal of dirt is brought into the school on childrens' boots, especially during wet weather.

PLAYGROUNDS.—These should have a hard surface. In connection with nine schools there are no shelters. Any shelters erected should be of a pavilion type so as to provide for classes being held in the open air during the summer months. Open air teaching should be utilised as much as possible during the hot weather; in some of the playgrounds shelter can be obtained under the trees.

ORGANISATION AND SUPERVISION OF MEDICAL INSPECTION.

(*b*) *General description of the Inspection arrangements which have been made for the co-relation of the School Medical Service with the Public Health Service and for the organisation and supervision of medical inspection, and account of the methods of inspection adopted, including* :—

(i.) SCHEDULE OF EXAMINATION.—The Board's Schedule of which a copy is given on page 142, Annual Report for 1909, is followed thoughout.

(ii.) ASSISTANCE GIVEN TO SCHOOL MEDICAL OFFICER.—Reference is made later to the assistance given by nurses in connection with treatment. The teachers have filled up the name, address, and age of the scholar, the standard and also particulars in regard to attendance. The notices to parents were also sent out by them and they assisted in the undressing of the children and in weighing and measuring.

(iii.) PRESENCE OF PARENTS.—A notice was sent inviting the parents to be present at the examination. The parents were present in 318 instances, the mother in 310 (35%) and father in 8 cases (.9%); other relations were present in 33 instances (4%) and friends or guardians in 13 instances (over 1%). In a good many instances useful information was obtained in regard to previous health of the children, family history, etc.

In the case of a child about to leave school, parents can receive advice in regard to the future occupation of the child, *e.g.* if a boy had a tendency to consumption, the parents would be advised to let the boy follow an outdoor occupation. It is of great assistance to have the mother present, when the younger children are examined, as they are too young to give much information about themselves.

Where parents are unable to be present, they are requested to fill up certain particulars referred to on page 141, Annual Report for 1909, and in the majority of cases these particulars were given.

(iv.) EXTENT OF DISTURBANCE OF SCHOOL ARRANGEMENTS.— In order to avoid disturbance of school arrangements as much as possible, I have examined at least 12, and often 14 or 15 children during an afternoon. In the majority of cases the examination only extended over two or three afternoons twice a year (sometimes it occupied only one afternoon) and it is therefore difficult to see how the education of the children could suffer materially. In 9 schools the inspection was carried out in one of the class-rooms ; this usually causes some inconvenience as one class room has to be emptied. The most inconvenience is naturally caused where there is the worst accommodation ; as soon as the child has been examined it returns to its class. In this connection it may be stated that the co-operation of the head or one of the assistant teachers during the examination is essential, and in the majority of cases this assistance has been given willingly. In circular 576, issued by the Board of Education, it is directed in sect. 13 (a) that "the inspection should be conducted in school hours and on school premises."

The best arrangement for carrying out the medical inspection would be to have a couple of rooms away from the main building ; one room could be used as a waiting-room for the parents and the other for purposes of inspection, the latter to be well lighted and over 20 feet in one direction. Where there is a central hall available the waiting room in some cases could be dispensed with.

I have been promised a room for medical inspection in connection with the Scudamore Schools, when the alterations and extensions have been carried out.

EXTENT AND SCOPE OF THE MEDICAL INSPECTION.

(c) *General Statement of the extent and scope of the medical inspection, carried out during the year, including :—*

(1) *The number of visits paid to schools and departments.*

During the year I paid 82 visits to schools in connection with the medical inspection. The inspections are made twice a year.

(ii.) The following children were examined :—

(a) All children five years and upwards at entrance.

(b) All children twelve years of age and upwards who were likely to leave and had not previously been medically inspected.

In addition 43 children were examined as special cases ; 10 of these children were brought to my notice by the teachers as having some defect on account of ill-health.

(iii.) The number of children inspected is shown in the table on page 77. The following is a list of children examined in each school :—

School.	*Boys.*	*Girls.*	*Total.*
All Saints' (Infants')	15	24	39
Blue Coat (Boys')	57	—	57
,, (Girls')	—	49	49
Holmer (Mixed)	11	3	14
,, (Infants)'	43	57	100
Roman Catholic (Mixed)	24	28	52
,, ,, (Infants')	15	14	29
Scudamore (Boys')	60	—	60
,, (Girls')	—	32	32
,, (Infants')	33	46	79
St. James' (Infants')	48	39	87
St. John's (Girls')	—	8	8
St. Martin's (Mixed & Infants')	29	26	55
St. Owen's (Boys')	74	—	74
St. Peter's (Girls')	—	65	65
Tupsley (Mixed & Infants')	15	13	28
TOTAL	424	404	828

(iv.) Children in connection with whom direction had been given in regard to treatment of defects were in a large number of cases referred for subsequent examination.

(v.) The following list shows the number of defects in connection with which instructions were given regarding treatment :—

	Ordinary.	*Special.*
Defective vision	57	5
Eye disease	12	2
Other defect of eye	17	1
Enlarged tonsils	59	2
Adenoids	43	2
Other defects of nose and throat	4	–
Ear disease	25	2

Deafness	43	2
Teeth irregular	37	1
,, decayed	35	1
Bronchitis	8	1
Phthisis, or suspicious Phthisis	4	2
Other respiratory disease or defect	4	–
Heart disease	7	3
Anæmia	29	16
Tuberculosis	2	–
Diseases of nervous system	1	–
Skin disease	21	1
Enlargement of Thyroid Gland	6	–
Curvature of Spine	1	–
Other disease	13	7
Verminous heads	61	2
Dirty body	16	3
Defective clothing	29	2
TOTAL	534	55

(vi.) The average time taken for each inspection, including weighing and measuring, was seven to ten minutes.

GENERAL REVIEW OF THE RESULTS OF MEDICAL INSPECTION.

(*d*) *General review of the facts disclosed by medical inspection, under the headings contained in the Schedule to Circular 582, including tables showing the height and weight of children inspected (according to age and date of inspection and sex).*

HEIGHTS IN 1911.

Boys.				Girls.			
Years of age.	Number at each Age.	Inches.	Centimetres.	Years of Age.	Number at each Age.	Inches.	Centimetres.
5	117	40.8	103.6	5	126	40.5	102.9
6	32	42.6	108.2	6	46	42.4	107.7
7	45	45·5	115.6	7	35	45·2	114.8
8	40	45·7	116.1	8	45	46	116.8
9	41	48	121.9	9	33	49	124.4
10	16	52.3	132.8	10	9	51.4	130.6
11	16	53·1	134.9	11	11	53·3	135·4
12	64	54·6	138.6	12	53	55·6	141.2
13	44	56.5	143·5	13	41	57·1	145·0
14	9	57	144·7	14	5	58.8	149·4

WEIGHTS IN 1911.

BOYS.				GIRLS.			
Years of Age.	Number at each Age.	Pounds.	Kilo-grammes.	Years of Age.	Number at each Age.	Pounds.	Kilo-grammes.
5	117	38.1	17.2	5	126	37.8	17.1
6	32	41.2	18.6	6	46	40.2	18.2
7	45	46.5	21.1	7	35	45.9	20.8
8	40	48.4	21.9	8	45	46.5	21.1
9	41	56.3	25.5	9	33	52.8	23.9
10	16	61.4	27.8	10	9	60.3	27.3
11	16	66.8	30.3	11	11	67	30.4
12	64	71.8	32.5	12	53	73.9	33.5
13	44	79.3	35.9	13	41	81	36.8
14	9	84.6	38.3	14	5	83.4	37.7

Early in 1911 Drs. Tuxford and Glegg, School Medical Officers for county areas in Lincolnshire, collected statistics obtained during school inspection during 1909 and 1910, obtained from 17 county and 44 urban districts in England (including Hereford City). These figures have since been tabulated by them and the information given in connection with the whole of England and under urban areas in England.

The averages have been worked out for Hereford children for the three years 1909-11, and the increase or decrease over the figures for urban areas in England are given in the tables below :—

BOYS.

Urban Areas in England & Wales, 1909 & 1910.				City of Hereford, 1909–10–11.				
							Increase or Decrease compared with Urban Areas.	
Age.	Number.	Height Centimetres.	Weight Kilogramm's	No.	Height Centimetres.	Weight Kilo grammes.	Height.	Weight.
5	33,048	102.7	17.3	303	103.4	17.2	+ .7	− .1
6	11,085	107.5	19.3	103	108.4	18.7	+ .9	− .6
7	22,731	114.3	21.0	151	115.8	21.2	+1.5	+ .2
8	7,744	119.0	22.7	160	119.1	22.6	+ .1	+ .1
9	5,174	123.7	24.7	119	123	25	− .7	+ .3
10	13,345	129.1	27.2	66	130.8	27.7	+1.7	+ .5
11	3,309	133.7	29.4	57	133.8	29.7	+ .1	+ .3
12	11,297	138.9	32.4	225	138.4	32.4	− .5	
13	30,600	142.4	35.0	171	141.7	34.3	− .7	− .7
14	2,961	146.8	38.0	32	146	37.3	− .8	− .7

GIRLS.

Urban Areas in England & Wales, 1909 & 1910.				City of Hereford, 1909–10–11.				
Age.	Number.	Height Centi metres.	Weight Kilo-gramm's	No.	Height Centi-metres.	Weight Kilo-grammes	Increase or Decrease compared with Urban Areas.	
							Height.	Weight.
5	32,361	102.0	16.9	315	102.4	16.9	+ .4	
6	11,137	107.2	18.4	143	106.9	18.3	− .3	− .1
7	21,907	113.4	20.4	138	115	20.7	+1.6	+ .3
8	7,375	117.5	22.1	164	117.6	21.4	+ .1	− .7
9	5,252	122.6	24.5	109	123.7	23.8	+1.1	− .7
10	12,891	129.4	26.5	46	129	26.3	− .4	− .2
11	3,216	132.3	29.1	62	133.8	29.0	+1.5	− .1
12	11,668	139.3	32.7	221	140.4	33.3	+1.1	+ .6
13	28,946	144.0	35.9	150	144.5	36.4	+ .5	+ .5
14	2,433	148.7	39.6	25	148.8	39.1	+ .1	− .5

WEIGHTS.—A kilogramme is equal to a fraction over 2lbs (2.2). It will be seen that in the case of boys, at ages 5, 7, 8, and 12 years, the weights of Hereford children are practically the same as those of the urban ones, whilst there is an increase of approximately half a pound at ages 9 and 11, and of a pound at the ages of 10 years ; there is a decrease of slightly over a pound at ages 6, 13, and 14 years. Comparing girls, at ages 6, 10 and 11 years, the weights of Hereford children are practically the same, whilst there is an increase at 7 years of over half a pound and at 12 and 13 of slightly over a pound ; there is a decrease of rather over a pound at ages 8, 9, and 14 years.

HEIGHTS.—A centimetre is equal to approximately two-fifths of an inch. It will be seen that in the case of boys, at ages 8 and 11 years, the heights of Hereford children are practically the same as those of the urban areas, whilst there is an increase of rather over half an inch at ages 7 and 10 years, and of about one-third inch at 5 and 6 years ; there is a decrease of one-fifth inch at 12 years and of approximately one-third inch at 9, 13, and 14 years. Comparing girls, at ages 8 and 14 years, the heights of the Hereford children are practically the same, whilst at ages 7 and 11 years there is an increase of rather over half an inch ; at 9 and 12 years of nearly half an inch, and approximately one-fifth inch at 5 and 13 years ; there is a decrease of about one-eighth inch at 6 and 10 years. At ages 10, 11 and 14 the numbers in the case of Hereford are not large enough to allow of accurate comparison.

The weights and heights of Hereford compare favourably on the whole with the children in urban areas. Any difference in height is very little, and in regard to weight, the greatest difference is slightly over a pound.

REGULARITY OF ATTENDANCE.

This was on the whole good ; at Holmer Infants' School the attendance was interfered with through Diphtheria, and at Scudamore Infants' and All Saints' Schools on account of Measles. In certain cases it has been necessary to exclude children from school, chiefly on account of infectious or contagious disease, and further reference is made later. It would be an advantage if some children could be allowed to attend school for the half day, but at present, on account of loss of grant which would result, I have hesitated to do this.

It is most important that children should not attend school in the early stages of an infectious disease, and I have known of children attending school at the commencement of an infectious disease in order not to lose the chance of obtaining a prize for good attendance. Sometimes the parents are inclined to send their children back too soon after measles or other infectious disease, and as a consequence other children in the same class at school become infected.

Where a child has been excluded on a medical certificate, there appears to be no reason why such a child should not obtain a prize for being " never absent, never late," if an allowance were made in connection with any absence from school through illness.

PREVIOUS INFECTIOUS DISEASES, &c.

The particulars in regard to children where information was obtained are as follows :—

	Boys.		Girls.	
	Number.	Percentage	Number	Percentage
Measles	304	71.6	305	75·4
Whooping Cough	188	44·3	207	51·2
Chicken Pox	129	30.4	113	27·9
Mumps	6	1.4	10	2.4
Scarlet Fever	25	5·8	39	9·6
Diphtheria	15	3·5	16	3·9
Influenza	–	–	1	.2
Bronchitis	8	1.8	9	2.2
Pneumonia	20	4·7	14	3·4
Pleurisy	3	·7	1	.2
Rheumatism	2	·4	6	1·4
Tonsillitis	–	–	–	–

The last five diseases were not specified, and so the information given will only represent in part what other illnesses had occurred.

It will be seen that the larger number of children had previously suffered from Measles, and one-half from Whooping Cough. Girls suffered a higher incidence than boys in regard to all the infectious diseases with the exception of Chickenpox.

VACCINATION.

Particulars in regard to vaccination in infancy were obtained respecting 408 boys and 395 girls; this had not been carried out in the case of 38 boys (9.3%) and 30 girls (8.2%); further reference to vaccination is made on page 34.

The above figures are a record of the good sense of the parents previous to the year 1906. If the number of "statutory" objections continues there will be a very different tale to tell in a few years.

FAMILY HISTORY OF CONSUMPTION.

Of the children examined, in 159 cases (approximately 20%) parents or relatives of the children inspected had either died from Phthisis or were suffering from the disease at the time of inspection. Particulars are as follows:—

	Number.	Percentage.
Parents	28	3.5
Brothers and Sisters	11	1.3
Uncle or Aunts	84	10.4
Other Relatives	36	4.5
Total	159	19.7

Of the above the following were suffering from the disease at the time of inspection:—

Father, 4 cases; mother, 5; brother, 2; sister, 2; uncle, 1 and aunt, 3 cases.

The remaining deaths were of 11 fathers and 8 mothers, 5 brothers and 2 sisters, 38 uncles and 42 aunts, 3 cousins, and 21 grand parents.

In two cases a grandmother's sister had died from Phthisis, and in two cases a great uncle had died from the disease. There was a history of the disease in eight other cases, but particulars were not given.

The information was obtained either from the parents or other persons present at the time of inspection, or from information supplied on the card provided for the purpose; in 23 instances this information was not given.

CLOTHING AND FOOTGEAR.

The following particulars were obtained in regard to clothing and footgear :—

		Boys.		*Girls.*		*Total.*	
		No.	Per cent.	No.	Per cent.	No.	Per cent.
Clothing—	Good	92	21.7	102	25.2	194	23.5
	Average .	297	70.1	274	67.9	571	68.9
	Bad	35	8.2	28	6.9	63	7.6
Footgear—	Good ...	92	21.7	102	25.2	194	23.5
	Average .	296	69.9	274	67.9	570	68.8
	Bad	36	8.4	28	6.9	64	7.7

It will be seen that on the whole the clothing was satisfactory. It is very important that children should have proper boots to wear during winter. In some cases the children had on too much clothing ; parents are inclined to overclothe a child with what they call " a weak chest." Some of the younger children had bare legs and superabundance of clothing over the chest.

CLEANLINESS.

Body.—The following particulars were obtained (the figures in brackets indicate the percentage of the number of children, not including " specials " examined.)

	Clean.	Somewhat dirty.	Dirty.	Lice marks.
Boys	366 (86.3%)	54 (12.8%)	4 (.9%)	12 (2.8%)
Girls	354 (87.6%)	49 (12.1%)	1 (.3%)	12 (3%)

Some of the children who had lice marks on the body at the time of the examination were clean, but on account of the lice marks have been put down as somewhat dirty. On account of the notice sent to parents, such children as these and others have a bath the night before the inspection.

Head.—The following are the particulars ascertained :—

	Clean.	Somewhat dirty.	Dirty.
Boys	376 (88.7%)	44 (10.4%)	4 (.9%)
Girls	302 (74.7%)	62 (15.3%)	40 (10%)

Under the term " dirty " are included all the girls' heads in connection with which a large number of nits were noticed. Girls with only a few nits in their hair are included in the term " somewhat dirty." In only a few of the boys' heads were any nits or pediculi found. The particulars in connection with the girls' heads are given in the table following ; pediculi were present in the case of the very dirty heads.

Some nits.	Many nits.	Total.
53 (13 %)	40 (10 %)	93 (23 %)

The particulars in regard to age are as follows :—

Ages	5, 6, 7 & 8.	9, 10, & 11.	12 & 13 years.
Number ..	47 (22 %)	13 (24 %)	23 (24 %)

The percentages are reckoned on the number examined at the respective ages. There is an improvement over last year (see page 70 annual report for 1910). It will be seen that a verminous condition of the head is much more common in girls than boys. In certain cases accompanying the verminous condition were sores, with the accompanying swelling of the posterior glands of the neck.

NUTRITION.

The particulars are as follows :—

	Normal.	Below normal.	Bad.
Boys	328 (77.4 %)	92 (21.7 %)	4 (·9 %)
Girls	335 (83 %)	66 (16.3 %)	3 (·7 %)

Of the children included as having normal nutrition in about one quarter the condition was " good " or " excellent."

TEETH.

The result of the examination of the teeth is shown in the table, and the number of decayed teeth is stated.

Age.	No. examd.	Number Decayed. 0	1-5.	5-10.	10 & over.
5	243	32 (13.1)	146 (60)	65 (26.9)	
6	78	9 (11.5)	34 (43·6)	35 (44·9)	
7	80	4 (5)	37 (46.2)	39 (48.8)	
8	85	4 (4·7)	40 (47)	38 (44·7)	3 (3·6)
9	74	2 (2.7)	42 (56.8)	29 (39·1)	1 (1.4)
10	25	3 (12)	11 (44)	11 (44)	
11	27	1 (3·7)	18 (66.7)	8 (29.6)	
12	117	9 (7·7)	79 (67·5)	29 (24.8)	
13	85	13 (15·3)	55 (64·7)	17 (20)	
14	14	1 (7·1)	8 (57·1)	5 (35·8)	
All ages	828	78 (9·4)	470 (56.8)	276 (33·3)	4 (·5)

Compared with 1910, there are a larger number of children with no decayed teeth. The number of children with 1 to 4 decayed teeth is the same, and the number of children with 5 teeth and upwards decayed is less. The condition of the teeth is on the whole unsatisfactory.

GLOSSARY.

The following explanation is given of some of the terms used in connection with the medical inspection of school children :—

Adenoids.—Growth of lymphoid tissue at the back of the nose, causing obstruction to breathing, &c.

Blepharitis.—Inflammation of the eyelids.

Conjunctivitis.—Inflammation of the surface of the eye.

Corneal Ulcer.—Ulcer on the front of the eye.

Impetigo.—A pustular condition of the skin.

Mitral Disease.—Affection of the mitral valves of the heart.

Nits.—The eggs of lice.

Psoriasis.—A chronic scaly skin disease affecting principally the elbows, knees and head.

Seborrhœa Capitis.—Scurf caused by excessive secretion of sebaceous matter from the scalp.

Thyroid Gland.—This is a gland situated on the front of the neck below the prominent thyroid cartilage commonly known as " Adam's apple." The term " goitre " is given to marked enlargement of this gland.

Tonsillitis.—Is a term used for inflammation of the tonsils.

EYES.

Defective Vision.—Altogether the eyesight of 507 children (275 boys and 232 girls) was tested. Children were examined at the age of seven years and upwards. The defects found were as follows :—

6-12ths (both eyes).

Years	7	8	9	10	11	12	13	14	Total
Boys	1	4	1	2	–	2	–	–	10
Girls	2	2	1	–	–	–	1	–	6

6-12ths (one eye, other eye normal)

Years	7	8	9	10	11	12	13	14	Total.
Boys	–	–	1(r)	1(l)	–	3(1r 2l)	1(l)	–	6
Girls	1(r)	3(r)	1(l)	–	–	5(3r 2l)	–	–	10

The figures in brackets indicate which eye was defective.

Over 6-12ths (both eyes).

	6-18ths.	6-24ths.	6-36ths.
Boys	3	–	1
Girls	–	2	4

With defects of 6-18ths, the ages of the boys were as follows :—8 years (1), 9 (2) ; 6-24ths, ages of girls (7 and 8 years) ; 6-36ths, ages of girls (8, 12, 12, and 14 years) and boy (14 years).

Over 6-12ths (one eye).

Boys.—6-9ths and 6-18ths, 1(l) (10 years) ; 6-12ths and 6-18ths, 2(l) (10 and 13 years) ; 6-18ths and 6-36ths, 1(r) (12 years) ; normal and 6-24ths, 2(l) (12 years), 1(r) (13 years) ; 6-24ths and 6-36ths, 1(r) (7 years) ; 6-24ths and 6-60ths, 1(l) (13 years).

Girls.—6-12ths and 6-18ths, 2 (1r, 11 years and 1l, 12 years) ; 6-12ths and 6-36ths (2r, 9 and 13 years), and (2l, 12 and 13 years).

A girl aged 13 years was blind in the left eye through an accident.

Two boys, aged 10 and 12 years, with defects (6-9ths, 6-12ths, and 6-6ths, 6-12ths), and two girls, aged 8 and 11 years, with defects (6-18ths, 6-9ths and 6-18ths, 6-12ths) were wearing spectacles at the time of inspection.

The figures 6-12ths, 6-18ths, mean that in the case of the right eye the vision is 6-12ths or one-half normal and in the case of the left eye 6-18ths or 1-3rd normal, testing each eye separately with Snellen's types at a distance of 20 feet ; there are 7 rows of letters, varying in size from above downwards, the largest letters being at the top, the numbers corresponding to each row, being from above downwards 60, 36, 24, 18, 12, 9, 6. With normal eyesight anyone should be able to read the last row or the last row but one, at a distance of 6 metres, and the vision would be 6-6ths, 6-6ths, or 6-9ths, 6-9ths ; if only able to read the third line from the top (D—24) the vision would be 6-24ths, 6-24ths, or 1-4th normal vision.

The small letters r and l in the particulars given above indicate which eye had the worse defect, *e.g.*, 6-24ths, 6-36ths (1 r, 7 years) means that in the case of a child 7 years of age, the vision in the right eye was 1-6th normal and in the left 1-4th normal.

Altogether, 19 boys (6.9%) and 18 girls (7.7%) had defective vision in both eyes, and 10 boys (3.6%) and 10 girls (4.3%) had defect in one eye ; the girls suffered to a greater extent than the boys.

Particulars in regard to the age periods, 7—9 and 12—14 years, are as follows :—

Age period.	No. examined.		Defective vision.	
	Boys.	Girls.	Boys.	Girls.
7, 8 & 9 years	126	113	11 (8.7%)	14 (12.3%)
12, 13 & 14 ,,	117	99	13 (11.1%)	13 (13.1%)

There are a larger number of children with defective vision at the later ages.

In the Report for 1910 I referred on page 79 to some of the causes of eye-strain, *e.g.*, bad lighting of class-rooms, use of small stiches in sewing, &c. The print in some of the school books is far too small, and sometimes a shiny, glossy paper is used, which cause a reflection of the light from the book. One reason why girls suffer from defective vision more than boys is, probably, because they read more at home; eye-strain is caused by too small print and insufficient light.

EXTERNAL EYE DISEASE.—The diseases were as follows:—

Disease.	Boys.	Girls.	Total.
Blepharitis	3	4	7
Conjunctivitis	–	4	4
Blepharitis and conjunctivitis	–	1	1

Both eyes were affected with the exception of a boy and girl aged 5 years, with left and right blepharitis respectively.

A girl aged 5 years had an ulcer on the right cornea, as well as double conjunctivitis.

SQUINT.—The particulars are as follows:—

	Left.	Right.	Both.	Total.
Boys	2	3	4	9
Girls	1	1	6	8

Two boys and a girl, aged 5 years, had left squint, and three boys, aged 5, 7 and 12 years, and a girl, aged 8 years, had right squint.

Convergent squint was found in 16 cases, and divergent in 1 case (a girl aged 11 years). It is important that treatment should be carried out at an early age, as defective vision is often associated with this condition. In only two instances (boys aged 5 years) were spectacles worn. Operative measures are sometimes useful for the removal of the condition.

OTHER.—A girl aged 7 years had marked nystagmus, and the vision was very defective.

Age in years	5		6		7		8		9		10		11		12		13		14		Total.		Percentage of Children examined.	
Disease or Defect.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.
External Eye Disease	1	3				1				1		1	1	1	1			2			3	9	·7	2.2
Defective vision—																								
(1) Both eyes					2	3	5	4	3	2	3			1	3	4	2	3	1	1	19	18	6.9	7·7
(2) One eye						1		3	1	1	2				5	5	2				10	10	3·6	4·3
Squint	4	3		1	1	1		2	1		2			1	1						9	8	2.1	1.9
Ear discharge	2	2			3				1			1	1			2					7	5	1.6	1.2
Defective hearing—																								
(1) Marked				2	2	2	1		2	3		1				5	2	1			7	14	1.6	3·4
(2) Moderate	5	6		4	7	5	9	5	5	6	3	1	2		2	8	2	2	1	1	36	38	8.4	9·4
Other	1	1		2	1	1	1	1		2			1			5	2	3	1	1	7	16	1.6	3·9
Enlarged tonsils—																								
(1) Marked	8	9	2	9	3	4	2	2	2	1		1	1		3	1	3	1	1		25	28	5·8	6.9
(2) Moderate	10	10	4	6	6	2	1	4	4	5	4	1	4	2	6	6	3	1			42	37	9·9	9·1
Adenoids	12	9	3	7	5	2	2		2			1			1	2	1				26	21	6.1	5·1
Tonsillitis		2											1			1					1	3	·2	·7
Other disease or defect of nose and throat	1	1												1	1			1			2	3	·4	·7
Enlarged glands	23	20	11	20	14	8	13	10	6	8	1	4	1	1	16	12	7	1	3		95	84	22·4	20.7
Thyroid gland enlargement	1	3	1	1	4		1	1	1	2		1	2	1		4		1	2		10	16	2·3	3·9
Heart disease	2	6	1		3			2	2		1				1	4	2	1		1	12	14	2.8	3·4
Anæmia	5	4	1	1	3	2	3	3		1			3		2	4	2	2			19	17	4·4	4·2
Bronchitis	8	6	3	4	1	1		2	4	2		1	1								17	16	4·0	3·9
Laryngitis															1						1		·2	
Suspicious phthisis	1						2						1								4		·9	
Other disease or defect of respiratory system	3	1	1		1	2	1	2	3	1			1		4	1	1		1		16	7	3·7	1·7
Nervous system	1		3				1	2		1					1						6	3	1·4	·7
Speech defects	14	4	3	7	7	1	2	1	2	2		1	2		3	4	2	1			35	21	8.2	5·1
Mental condition—																								
(1) Bright			2	6	9	7	8	9	4	5	2	4	3	3	7	8	12	11	3		50	53	16.2	19.0
(2) Dull			7	6	4	4	4	4	6	6			1	1	8	8	2	2	2	2	34	33	11.0	11.8
(3) Defective			2					1			1					1					3	2	·9	·7
Skin disease	7	4	2	1	5		1		1						1	1	1	2		1	18	9	4·2	2.2
Other forms of Tuberculosis	1	1			1																2	1	·4	·2
Rickets	2		1	2	1	3	2	1	1	1	1				3						11	7	2·5	1·7
Deformities	2	1	1		1	4	4	1	4	1	1				7			2			20	9	4·7	2.2
Other	3	2			1		1								1		2				8	2	1.8	·4

NOSE AND THROAT.

Enlarged Tonsils and Adenoids.—Particulars are given in the table on page 87. The number of children examined is too small for accurate deduction, so I have worked out the percentage of boys and girls affected for the years 1909, 10 and 11, at two age periods, 5 and 6 ("entrants") and 12, 13 and 14 ("leavers"). The particulars are as follows :—

	No. examined.	Enlarged Tonsils. Marked.	Moderate	Adenoids.
		Entrants.		
Boys	406	33 (8.1%)	59 (14.5%)	30 (7.3%)
Girls	460	48 (10.4%)	59 (12.8%)	29 (6.3%)
		Leavers.		
Boys	428	33 (7.7%)	64 (14.9%)	14 (3.2%)
Girls	396	29 (7.3%)	52 (13.1%)	16 (4%)

There are a smaller number of children with enlarged tonsils and adenoids at the later ages, and the diminution is more marked in the case of adenoids, in certain cases an operation for the removal of tonsils and adenoids has been carried out, and in other cases apart from surgical operation, definite improvement sometimes occurs.

Surgical treatment is indicated in all cases of marked enlargement of the tonsils and in a certain proportion of moderate enlargement.

Operative measures are indicated usually in the case of children affected with adenoids. The presence of enlarged tonsils or adenoids renders a child more susceptible to infectious disease ; children with such conditions are susceptible to inflammation of the throat and nose. In an earlier part of this report, I referred to the fact that the nose and throat were the paths of infection of a large number of germs, *e.g.*, those which cause Diphtheria, Scarlet Fever, Measles, Whooping Cough, Pneumonia, Rheumatic Fever, &c. ; children with affections of the throat and nose more readily contract such diseases.

Four boys, aged 5, 8, 11, and 12 years, had had an operation for the removal of tonsils and adenoids, in two cases within a few months of the inspection, in one case the previous year, and the other boy (11) had been operated on for this condition five years previously. Two boys, aged 6 and 11 years, had had their tonsils removed two and three years previous to the inspection. Five girls, aged 7, 8, 9, 9, and 13 years, had an operation for removal of tonsils and adenoids: in one case, a child 13 years, a few months before the inspection, and in the remaining cases the interval between the operation and the date of inspection was 1, 2, 2, and 6 years respectively. In the case of a girl aged 12 years the tonsils had been removed 5 years previously.

OTHER AFFECTIONS OF THE NOSE AND THROAT.—Two boys, aged 5 and 12, and two girls, aged 5 and 13 years, had nasal discharge; this was accompanied by sores on the nose in the case of the boy aged 12 and the girl aged 5 years.

A girl aged 11 years had some obstruction on the right side of the nose, the result of an accident (being thrown out of a perambulator) in infancy.

The cases of tonsillitis referred to in the table on page 87 were all of the catarrhal variety with the exception of a girl aged 5 years, who was suffering from follicular tonsillitis.

EAR DISEASE.

There was discharge from one or both ears at the time of inspection in 7 boys and 5 girls. This was confined to one ear with the exception of two girls aged 12 years, who had discharge in both ears.

Deafness was present in both ears in the case of 18 boys and 28 girls; 25 boys and 24 girls had deafness in connection with one ear. The deafness was considered marked when the tick of a watch could not be heard within 4 inches of the ear, and moderate if it could be heard between four inches and 12 inches. Particulars are as follows:—

	Marked.		Moderate.	
	Boys.	Girls.	Boys.	Girls.
Both ears	5	6	13	22
One ear	5	8	20	16

The deafness was caused by wax in at least a quarter of the cases (noticed in 20). Other causes were recent or old ear disease, and the presence of tonsils and adenoids. For the years 1909, 10 and 11, in connection with entrants (5 and 6 years) and leavers (12, 13, 14); the particulars are as follows:—

Entrants 1909-11.

	Examined.	Ear discharge.	Deafness.
Boys	406	7 (1·7%)	22 (5%)
Girls	460	8 (1·7%)	27 (5%)

Leavers, 1909-11.

	Examined.	Ear discharge.	Deafness.
Boys	428	6 (1.4%)	30 (7%)
Girls	396	8 (2%)	46 (11.6%)

Of the children examined during 1909, 10 and 11, of the "entrants," 1 in 58 of the boys and 1 in 57 of the girls had ear discharge ; in the case of the leavers the numbers were 1 in 71 and 1 in 49 respectively.

OTHER.—During the year 1911, 8 boys and 16 girls had suffered from either recent or old disease, but there was no discharge at the time of inspection. The particulars are as follows :—

	Boys.	*Girls.*
Both ears	2 (aged 5 & 13 years)	7 (aged 5, 6, 8, 9, 12, 13 (2) years).
One ear	5 (aged 7, 8, 11, 13 & 14 years).	8 (aged 6, 8, 9 (2), 12 (3), & 13 years).

In connection with the majority, discharge from the ear was stated to occur at intervals. It is most important that any discharge should be treated, and that children who have had ear disease should be kept under observation and be seen by a Doctor from time to time.

ENLARGEMENT OF GLANDS.

There was enlargement (generally of both cervical and submaxillary glands) in the case of 22.4 per cent of the boys and 20.7 per cent. of the girls examined during 1911 ; particulars are given on page 87. In addition there was enlargement of the posterior cervical glands in some of the children, associated with a verminous condition of the head with sores. In three cases, boys aged 5 and 12 years, and a girl aged 6 years, the enlargement of the submaxillary and cervical glands was marked, and in the remaining children the enlargement was moderate.

Particulars for the years 1909, 10 and 11 are as follows :—

Entrants (aged 5 *&* 6 *years).*

	No. examined.	Defect.
Boys	406	101 (24.8%)
Girls	460	103 (22.3%)

Leavers (12, 13 *&* 14 *years*).

	No. examined.	Defect.
Boys	428	81 (18.9%)
Girls	396	83 (20.9%)

Over one-fifth of the "entrants" and "leavers" had enlarged glands of the neck. The cause of this enlargement has been discussed in previous reports.

ENLARGEMENT OF THE THYROID GLAND.

This occurred in the case of 10 boys (2.3%) and 16 girls (3.9%); particulars are given in the table on page 87. The condition was marked in the case of two boys aged 7 years, and four girls aged 5, 9, 12 and 12 years. In these cases the children had lived in the City for several years, and in the majority since birth; the town water, which is very soft, had been used in each case. In the remaining cases, the town water had been used since birth. On page 75 Annual Report for 1910, I stated that in three-fifths of children with enlarged thyroid gland the town water had been in use since birth. Marked and moderate degrees of enlargement of the thyroid gland in connection with the children of this city are not caused through drinking water containing a good deal of lime; on the contrary, the town water in use is very soft, being a river water. It would be interesting to have particulars from other parts of the country, urban and rural.

HEART DISEASE.

There was mitral disease in connection with one boy aged 6 years, and two girls aged 8 and 12 years. The remaining conditions found were of a functional nature. Dilatation was found in the case of 4 boys aged 5, 7 (2), and 9 years, and 9 girls aged 5 (5), 8, 12 (2) and 14; hypertrophy in connection with 4 boys aged 7, 12 and 13 (2), and one girl aged 12 years.

In boys a condition of hypertrophy or dilatation is sometimes caused by over-exertion in games. In girls a condition of dilatation is often associated with Anæmia.

Where compensation is established the child can continue to play games and even go through the physical exercises; in fact some forms of heart trouble are benefited by properly graduated exercises. At the same time great care needs to be exercised in the case of children suffering from valvular disease, and usually the physical exercises in school have to be modified or dispensed with altogether.

ANÆMIA.

This condition was present in 19 (4.4%) of the boys and 17 (4.7%) of the girls examined. In the majority of cases there was a moderate degree associated with defective nutrition.

PHTHISIS.

No actual cases were found, but several children were regarded as suspicious cases of the disease and will be kept under observation. The children examined in previous years who had suspicious signs have in the majority of cases improved considerably in health, and in only a few cases has the disease, if present, persisted. Particulars in connection with family history of consumption are given on page 81.

OTHER DISEASE OR DEFECTS OF RESPIRATORY SYSTEM.

Bronchitis.—This disease was generally found associated with young children; the particulars are given in the table on page 87. Seventeen boys (4%) and 16 girls (3.9%) were suffering from this disease at the time of inspection.

Other.—A boy aged 12 years had pharyngitis and laryngitis, and another boy, 11 years, suffered from laryngitis, possibly of a tubercular nature.

In the case of 5 boys aged 7, 8 (2), 9 and 12 years, and 5 girls aged 5 (2), 8, 9 and 14 years there was a pre-tubercular condition of one or other apex of the lungs, viz., some dulness, harsh or irregular breathing, increased vocal resonance, &c.; these cases have not been included as suspicious cases of Phthisis. Other conditions found were deficient expansion owing to contracted chest, &c.

OTHER FORMS OF TUBERCULOSIS.

Two boys, aged 5 and 7 years, were suffering from tubercular glands of the neck, and a girl aged 5 years from left hip disease at the time of inspection.

There were scars of the neck indicating the site of previous abscesses and tubercular glands in the case of 3 boys and 2 girls; with the exception of a boy who had had both sides of the neck affected the condition was present on one side.

A boy 14 years had had tubercular disease of the left knee, 18 months before the inspection, and a girl aged 6 years had scars on the left arm, the result of operations for tubercular disease of the bone.

NERVOUS SYSTEM.

A boy aged 6 years was subject to epileptic fits. In connection with three boys there was infantile paralysis, viz., of the left side in two boys aged 8 and 12 years; a boy aged 6 had some paralysis of the upper arm on the left side and in the case of the boy aged 12 years there was some paralysis of the left leg. Two boys, aged 5 and 6 years, had nervous twitching of the eyelids.

A girl aged 8 years was affected with nocturnal eneuresis, and two girls, aged 8 and 9 years, were subject to night terrors; in these cases I obtained a history from the parents, I have no doubt that other children suffered from the same complaint.

SPEECH DEFECTS.

The particulars in regard to defects of speech are as follows:—

	Nasal Voice.	Lisp.	Nasal & Lisp.	Stuttering.	Stammering.	Defective Articulation.	Other.
Boys ..	8	7	–	3	2	11	4
Girls ..	10	5	1	2	–	3	–

Two boys aged 12 and 13 stammered. The ages of the children with defective articulation were:—5 years (10), 6 (3), 8 (1); children at an early age are sometimes unable to pronounce certain letters. Nasal voice and thick speech are often associated with adenoids.

MENTAL CONDITION.

It will be seen from the table on page 87 that the condition was normal in the majority of children examined, above normal in connection with 16.2% of the boys and 19% of the girls, and that in 11.9% of the boys and 12.5% of the girls the condition was below normal, .9% of the boys and .7% of the girls being mentally defective.

SKIN DISEASE.

The conditions found were as follows:—

	Ringworm (scalp).	Impetigo.	Eczema.	Seborrhoea capitis.	Other.
Boys	3 (7, 8 & 9 yrs.)	5	6	2	1
Girls	—	3	3	2	1

A boy aged 7 years had Psoriasis, and a girl aged 14 years sores of the forehead.

RICKETS.

This had been present in early childhood in connection with boys 2.5 % and girls 1.7 %. The disease is uncommon in this town.

Rickets is a disease of early childhood which occurs among the badly fed, the incorrectly fed and the badly housed. It is essentially a disease of nutrition. Some of the manifestations of the disease are, enlargement of the ends and deformity of the bones of the upper and lower extremities, &c.

DEFORMITIES.

The deformities due to rickets were as follows :—

Boys.—Inverted tibiae (5 years), barrel shaped chest and inverted tibiae (7 years), barrel shaped chest (10 and 16 years), inverted tibiae (5 years), pigeon chest in 4 boys aged 8 (2) and 12 (2) years, flat chest (9 and 12 years). The years refer to the ages of the children.

Girls.—Inverted tibiae (7 years), inverted tibiae and flat foot (7 years), deformed chest (8 years), pigeon chest 2 girls aged 7 and 9 years.

Other Conditions.—Talipes equino-varus of one foot was present in the case of four boys aged 8, 9, 12, and 12 years, and two girls aged 5 and 13 years ; posterior curvature of the spine resulting from accidental injury to spine in a boy 9 years ; anterior curvature of the upper part of the spine in a girl aged 13 years.

Other conditions were due to deformity of the chest, flattening and depression.

Talipes is commonly known as club-foot, the condition is either congenital or acquired ; in the latter case the result of acute poliomyelitis (infantile paralysis), this condition has not been included under defects of the nervous system.

OTHER DEFECTS.

These were as follows :—

Boys.—Inguinal hernia (rupture), right side, three boys aged 5, 11 and 12 years ; left side, in two boys aged 8 and 13 years. Two boys, 5 and 13 years, wore a truss ; in another case an operation had been performed for left rupture. A boy aged 5 years had a nævus on the left cheek.

Girls.—A child 5 years had a slight degree of wry neck. There was a scar on the right side of the neck, showing the site of an operation for this condition at the age of 2 years.

SPECIAL CASES.

During 1911 the head teacher of each school visited, was asked to bring to my notice any children who appeared to be in ill-health or were suffering from the effects of defective vision, deafness, &c.

These cases have not been included in the previous statistics. The weights and heights were only taken in certain cases. Several children had been examined before, and were re-examined to see whether any improvement in the general condition had taken place. Altogether, 28 boys and 15 girls were examined, and the particulars found are given under different diseases.

ENLARGED TONSILS AND ADENOIDS.

These conditions were present in a boy aged 11 years; he also had squint, but was wearing glasses when examined. The clothing was below average.

A girl aged 6 years had also some enlargement of the thyroid gland, both her head and body were dirty. She had been previously examined; there was no improvement in regard to cleanliness and the other defects had not been attended to. A girl aged 7 years had also defective clothing and dirty head and body; another girl aged 6 years had bronchitis, she had previously been examined.

EXTERNAL EYE DISEASE.

A boy aged 5 years suffered from conjunctivitis, and two boys aged 7 and 9 years from blepharitis, and conjunctivitis and blepharitis respectively.

DEFECTIVE VISION.

BOYS.—The defects were as follows:—Both eyes 6-12ths, two boys aged 11 and 13; 6-36ths and slight squint, boy aged 9 years; 6-24ths and 6-18ths, boy aged 8 years.

GIRLS.—Aged 10 years, 6-36ths, 6-60ths (also anæmia); 11 years, 6-12ths, 6-12ths, and 10 years, 6-24ths right eye. In the last case there was also anæmia and some enlargement of the thyroid gland, this was the second examination.

EAR DISEASE.

A boy aged 10 years had right ear discharge and deafness; a girl aged 11 years suffered from the same in the right ear and also bronchitis and anæmia. In both cases the nutrition was below normal.

THYROID GLAND ENLARGEMENT.

A girl aged 12 years had moderate enlargement as well as anæmia.

HEART.

A boy aged 13 years had mitral disease, the result of rheumatic fever also marked anæmia. He was allowed to go to school for a time, but physical exercises were not permitted, and later he was excluded altogether on account of the heart condition becoming worse.

ANÆMIA.

This condition was present in the case of boys aged 5, 8 (2), 9, 10 (2) and 11 (2) years, and girls aged 8, 10 (3), 11, and 12 years. The condition was marked in the case of a girl aged 10 years, and a boy aged 9 years. A boy aged 11 years was undeveloped, and the nutrition was below normal. A girl aged 11 years had a dilated heart and bronchitis, the clothing was defective and the nutrition poor.

Three girls aged 10, 12, and 8, and a boy aged 5 years, had been previously examined, and in the first two cases there was some improvement in the general condition.

RESPIRATORY SYSTEM.

PHTHISIS.—A boy aged 8 years was probably affected with the disease ; in this case there was anæmia and the nutrition was poor. There were suspicious signs in a boy aged 6 years. A girl aged 7 years, who had been previously examined and in which there were suspicious signs, showed considerable improvement.

BRONCHITIS.—A girl aged 5 years suffered from this complaint.

NERVOUS SYSTEM.

Two boys aged 7 and 8 years of age were mentally defective. The former boy was rather dirty and the nutrition was below normal ; the latter had moderate enlargement of the thryoid gland. A girl aged 7 years had chorea.

OTHER.

A boy aged 11 years had right rupture ; the head and body were dirty.

The other conditions were caused by neglect. Four boys aged 7, 10, 11 and 13 years were dirty and wore defective clothing and boots. The boy 7 years had been previously examined, and there was some improvement. The nutrition was in each case below normal. The boy 13 years had also eczema and adenoids.

HOME CIRCUMSTANCES, SOCIAL AND INDUSTRIAL CONDITIONS.

(*e*) *General review of the relation of home circumstances and social and industrial conditions to the health and physical condition of the children inspected, as far as facts bearing on this point have come under notice.*

These matters have already been referred to in the reports for 1909, page 169, and pages 78 and 79 report for 1910. During the latter part of the year particulars were obtained in respect to the housing and other conditions in regard to persons displaced from houses which were unfit for habitation (see page 48) ; I also visited the schools and obtained a list of children who wore defective boots, were badly nourished and appeared to be neglected. I found that in the worst cases the children resided in houses at a comparatively low rental and had previously lived in houses which were unfit for habitation. I have already pointed out that the majority of parents displaced from houses unfit for habitation were occupied in casual work, that the wages were low and that in consequence there was a difficulty in either paying a suitable rent or providing sufficient food or clothing for the children ; in other cases neglect was caused through intemperance. In the Annual Report to the Board of Education for 1910, Sir George Newman states that " The proper and sufficient feeding of the child is primarily the function of the home, and it is to the gradual improvement of the home that Local Education Authorities must primarily look for relief from the special difficulties which confront them through the malnutrition of the child."

In a smaller proportion of cases of malnutrition the children were well looked after and well clothed, but on the whole children badly nourished came from homes as stated above.

TREATMENT OF DEFECTS.

(*f*.) " *Review of the methods employed or available for the treatment of defects, such as defective eyesight, carious teeth, nasal obstruction or adenoids, tonsillitis, discharging ears, pediculosis, ringworm and other skin diseases, including an account of the action of school nurses in obtaining or assisting in the treatment of such defects.*"

CLEANLINESS.—Verbal instructions were given in respect to verminous conditions of the head and body, at the time of inspection, and the attention of parents was drawn to any dirty condition of the head and body. In the absence of parents written notices were sent. In 61 cases attention was drawn through verbal or written notice to verminous condition of the head, and in 16 cases to a dirty condition of the body. In the majority of cases the matter was promptly attended to. Where there was very little or no improvement in the condition of the head, I received a communication in some of the cases from the Head Teacher, and the child was then excluded and a visit arranged for by one of the district nurses.

Altogether 7 notifications were received from the teachers, and in addition other girls were seen at the Health Office and excluded.

Altogether 15 girls were treated, necessitating 75 visits. In the majority of cases the condition was marked, and the nurses took a good deal of trouble with the children. In two cases there were two children and in another instance three children in the same house.

Where no further treatment was necessary and the heads were clean a letter was sent to the mother warning her to look after the child in future.

Some of the head teachers take a real interest in the children, and the parents soon realise that they must send their children to school clean. It is astonishing what can be done through the influence of the teacher, and I have visited schools where it would be difficult to find a dirty or verminous child. although some of these children come from some of the worst homes in the City. A large number of the most insanitary houses in the City have been demolished and the housing conditions vastly improved during the last ten years ; there can be no doubt that as time goes on the habits of cleanliness inculcated into the minds of the children will have a marked influence in the homes of future parents. The work done by some of the teachers in this connection is excellent. Although there has been some improvement in regard to the condition of some of the children, it will be seen from the results of the medical inspection, that there is still a small but distinct proportion of girls with verminous conditions of the head ; it is therefore disappointing to receive only 10 notifications this year compared with 33 last year. Three of the children were sent to the Health Office. The number of notifications in regard to the condition of the head from any particular school, obviously gives no ground for assumption that the condition is worse than in the case where no notifications have been received.

When arrangements were made by your Committee with the Hereford City Nursing and Maternity Society to allow treatment of this condition by their nurses, I thought there would be some chance of eliminating the worst cases ; but unless I am informed as to what children have a verminous condition of the head, it is obviously impossible to do much in this direction.

The average period of treatment necessary under the district nurse was 4 days ; in some cases the mothers do not obtain the same results in as many weeks. The longest period necessary was 10 days.

In the report of Sir George Newman to the Board of Education for 1910, an account is given of school baths. Shower baths have been sanctioned in connection with new elementary schools at several towns, and at existing schools in other towns. The installation has consisted usually of 10 to 20, and suitable accommodation for dressing is provided. It states that "the provision serves in most cases for children from neighbouring schools, as well as for those attending the school to which the baths are attached. The bath is usually available for all children, and avowedly forms part of the training of the child, and is supervised by the teaching staff. As a rule the children are bathed once a week." It would be a great advantage if some shower baths could be installed in connection with one of the elementary schools in this town.

CLOTHING AND FOOTGEAR.—Some of the worst cases of defective clothing were brought to my notice by the teachers ; a letter was sent to the parents drawing attention to the matter, and in certain cases where there was evidence of neglect the attention of the Society for the Prevention of Cruelty to Children was drawn to the matter, and a visit from Inspector Nicol usually produced the desired effect. I am indebted to him for his assistance in connection with these cases.

Teachers assisted poorer children in some cases by giving them boots obtained from parents in a better position.

In the annual report for 1910 I mentioned that the Watch Committee had approved of a system of Police Aid in connection with the provision of clothing for poor children. At Brighton and other towns clothing is sent to the Police, and afterwards distributed in suitable cases.

During the latter part of the year I visited the homes of a number of children who wore defective boots, and in the majority of cases owing to the low wages earned, the parents had some difficulty in procuring proper footgear for their children. I have previously mentioned that clogs are cheaper than boots and last longer.

Medical and Surgical Treatment.

Defects.	Treated by own Doctor.	Treated by Dentist.	Treated by Optician.	Treated at			Other.	Operation performed.	Spectacles provided.	Treatment promised.	No treatm't obtained.	Total.
				General Hospital.	Eye & Ear Hospital.	Dispensary.						
Defective vision	10	–	5	8	12	1	–	–	15	9	12	57
Eye disease	4	–	–	–	4	–	–	–	–	–	4	12
Other defects of eye ..	1	–	–	2	3	–	1	–	2	–	2	9
Enlarged tonsils	17	–	–	7	1	1	1	9	–	4	28	59
Adenoids	16	–	–	7	–	1	–	9	–	2	17	43
Other defects of nose and throat	2	–	–	1	–	–	–	–	–	–	1	4
Ear disease	10	–	–	1	6	3	–	–	–	1	4	25
Deafness	14	–	–	5	10	1	1	–	–	3	9	43
Teeth irregular	–	9	–	2	–	–	–	–	–	2	24	37
Teeth decayed	1	8	–	–	–	–	–	–	–	5	21	35
Bronchitis	4	–	–	–	–	1	–	–	–	–	2	7
Phthisis	3	–	–	1	–	–	–	–	–	–	–	4
Heart Disease..	4	–	–	2	–	–	1	–	–	–	–	7
Anæmia	19	–	–	3	–	–	4	–	–	–	2	28
Tuberculosis	2	–	–	–	–	–	–	–	–	–	–	2
Diseases of nervous system	1	–	–	–	–	–	–	–	–	–	–	1
Skin diseases	10	–	–	2	–	–	5	–	–	1	3	21
Enlargement of thyroid	3	–	–	2	1	–	–	–	–	–	–	6
Curvature of spine ..	1	–	–	–	–	–	–	–	–	–	–	1
Other diseases	12	–	–	1	–	–	–	–	–	–	4	17

Medical Defects.—I have already mentioned that visits to the schools for purpose of medical inspection were made twice a year. On the completion of the inspection, a list of the defects found was sent to the Head Teacher. After an interval enquiries were made through the teacher in regard to the treatment carried out, and where there had been no treatment a second notice was sent to the parents, and if nothing was done a third notice. In regard to the defects found during 1911 ,third notices have been sent in the absence of treatment of children examined in the early part of the year, and second notices in connection with those children examined during the last quarter. The particulars in regard to treatment are given in the table above, there will be some increase in the number of cases treated after third notices have been sent out.

Of the children with defective vision 36 received treatment, 63% and 26% were provided with spectacles ; 45% of children with enlarged tonsils, and 55% with adenoids received treatment, but only 15% of children with enlarged tonsils and 20% with adenoids were operated on. The special cases are not included in the above list, the majority received treatment.

In regard to ear disease and deafness over 70% of the cases were treated. In the table the term " other " applies to treatment at home or through a druggist.

The teeth of only 27% of the children were treated; in only the worst cases of dental disease was treatment recommended.

It will be seen that where treatment was obtained, in the case of defective vision 22% of the children were treated at the Herefordshire General Hospital and 33% at the Victoria Eye and Ear Hospital; 27% of the children with tonsils and adenoids were treated at the General Hospital and 2% at the Eye and Ear Hospital; and in connection with ear disease and deafness 11% were treated at the General Hospital and 31% at the Eye and Ear Hospital. Fifty-eight per cent. of the treatment of all the cases was carried out either by the family doctor or dentist, 31% in hospitals (General Hospital 17%, Eye and Ear Hospital 14%) and 3 % at the Herefordshire Dispensary. Slightly over ~~half~~ received hospital and dispensary treatment.
a third

During the early part of 1911 I made a list of defects of vision, enlarged tonsils, adenoids, ear disease, and suspicious cases of Phthisis found among children examined during years 1908, 9 and 10. About a third of the children had left school, and the figures given refer to the treatment carried out in the remainder. In respect to defective vision 55% had received treatment and 44% were wearing spectacles. Medical advice had been obtained for 38% of the children with enlarged tonsils and adenoids, and an operation had been performed in 11%. Treatment was obtained for discharging ears in 64% of the cases. Fourteen children were examined who were considered to be suffering from suspicious Phthisis. In 7 cases there had been considerable improvement in health and most of the signs had disappeared; two suspicious cases had been excluded from school, and the other cases are still under observation.

I presented a report to the Education Committee giving the above particulars. In December, 1910, a letter was received from the Secretary of the Herefordshire General Hospital enclosing a copy of a report received by the Board of Management from the Honorary Staff of the Hospital. This report was adopted at a meeting of the Hospital Board on January 3rd, 1911, and it was resolved " that the Board beg accordingly to inform the Hereford Town Council that after say 30th of June next, they will no longer be able to treat at the Hospital school medical cases as referred to in the report." At the meeting of the Education Committee on April 28th I submitted a report on the treatment of medical and dental defects in school children, and also stated that if the resolutions passed by the Hospital Board were carried out, a large number of the children with defects would receive no treatment whatever. I also reported on the probable number of defects which would require treatment during 1911. It is considered by members of the medical profession unfair that children, found on medical inspection to have defects, should be treated at a hospital.

The resolution passed at the Annual Meeting of the British Medical Association on July 23rd, 1909, is as follows:—

"That the Association should oppose the reference of school children, found defective, to public medical charities for treatment, whether or not accompanied by payment or subsidies."

The question of providing treatment at a clinic for medical and dental defects is at present under the consideration of the Committee, and I think it would be possible to make an arrangement with members of the medical and dental professions in this town to carry out the treatment at a reasonable cost.

The following resolution passed at a meeting of the Education Committee was confirmed by the Town Council on Dec. 5th, 1911: "That in view of the growing burdens imposed by recent legislation and departmental requirements, the Town Council be asked to petition the Board of Education for substantial aid to assist the Education Authority to undertake medical inspection, school clinics or dispensaries, the employment of school nurses, and the feeding or necessitous school children." There can be no doubt that a grant given towards the cost of treatment would ensure a much larger percentage of defects being treated than at present.

Copies of an appendix to the report referred to above, on the treatment of teeth, were on the suggestion of your Committee sent round to the managers of the various schools, requesting them to consult the school teachers as to the best method of giving effect to them. The Appendix referred to the prevention and treatment of dental caries, and it was pointed out that dental decay could be prevented by (1) Improved methods of feeding, (2) Removal of particles of food which collect in the crevices of the teeth and cause decay. The question of methods of feeding was referred to on pages 80 and 81 of the Annual Report for 1910.

One suggestion in the report was that to ensure each child cleaning its teeth regularly it would be an advantage to have "toothbrush drill" at the school at a fixed hour each day.

This suggestion did not find favour with the teachers. The idea is certainly not new. In a well-known book "The Medical Inspection of School Children," by Dr. Mackenzie, written in 1904, is the following:—"Tooth-cleansing drill will strike the conventional person as a preposterous and ridiculous extension of 'medical faddism.' But this opinion leaves us quite unmoved. We can always silence it by a single question—Is it more preposterous or more ridiculous to teach our children how to preserve their teeth than to reject tens of thousands of good army and navy recruits because they cannot munch hard biscuits with the teeth left to them."

PREVENTION OF INFECTIOUS DISEASE.

(g) *Review of action taken to detect and prevent the spread of infectious diseases, including reference to action taken under Article* 45 (*b*), 53 (*b*) *and* 57 *of the Code of* 1908.

On pages 174 to 181, Annual Report for 1909, I gave particulars in regard to the action taken in this town in regard to the prevention and spread of infectious disease. I am indebted to those head teachers who have given me information in respect to infectious and contagious disease; particulars are given in the table. Any information in connection with non-notifiable infectious diseases, such as Measles, Whooping Cough, Chickenpox, Mumps, &c., is most useful, and I hope more notifications will be sent in the future. On June 13th I sent a communication to each of the head teachers, stating that it was very desirable that more information in regard to infectious disease or unclean and verminous condition, in connection with school children, should be furnished in the future. I am indebted to the school attendance officer for information in regard to children suffering from infectious disease. Since Nov. 7th Mr. Allen has kindly supplied me each week with a list of absentees and I have been able to pick out any cases of infectious disease. In each case a leaflet is sent to the parent stating the time the child should be kept from school and also giving information in regard to the exclusion of other children in the house from school.

Where several children from the same school were affected with Diphtheria, the teachers were asked to send children for examination to the health office with slight sore throats. Altogether, I examined 68 children with tonsillitis, swabs were taken in each case and in 18 cases diphtheria bacilli were found in the throats, by excluding these carriers further spread of the disease was arrested; no child with infection returned to school until a swab was returned as negative. Particulars in regard to spraying the throat, &c., have already been given under Diphtheria.

Nine suspicious cases of Mumps were also seen by me, and 6 of these were excluded; the remaining children suffered from enlarged glands of the neck.

Two cases of Phthisis were re-examined, and two children were found to be suffering from suspicious Phthisis.

School.	Chicken Pox.	Measles	Mumps	Whooping Cough.	Ringworm.	Skin Disease	Other.
All Saints' (Infants)	1	68	—	—	—	—	—
Holmer (Infants)	—	—	—	—	—	—	1
Roman Catholic (Mixed)	—	1	4	—	—	—	—
Roman Catholic (Infants)	—	1	—	—	1	—	—
St James' (Infants)	9	23	1	9	2	—	—
St.Martin's (Mixed & Infants) ..	1	4	1	—	—	—	—
St. Peter's (Girls)	—	6	7	1	—	—	2
St. Peter's (Infants)	—	3	—	—	—	—	—
Scudamore (Boys)..	2	3	9	—	3	1	3
Scudamore (Girls)	—	7	10	—	—	1	1
Scudamore (Infants)	—	9	11	—	—	—	—
Tupsley (Mixed and Infants) ..	—	1	—	—	—	—	—
Total	13	126	43	10	6	2	7

Eleven visits were paid to schools in connection with infectious disease, and in addition 38 visits were made for the purpose of examining children at their own homes who were suffering from suspicious infectious disease, usually Scarlet Fever and Diphtheria.

SCHOOL CLOSURE.—Measles occurred among the children attending All Saints' and Scudamore Infants' Schools towards the latter end of October; in order to prevent further spread of the disease both schools were closed on Oct. 26th and 27th, until Nov. 27th. The cases in Scudamore Infants were confined to one class, but at All Saints' the disease had spread to all the classes. I visited All Saints' School on Nov. 28th and found that there were 68 children away on account of the disease, I therefore arranged for the school to be closed again until after the Christmas holidays. Both schools were closed under Article 53 (*b*) of the Code. The floors and desks were washed with disinfection in the interval. Measles was also prevalent among the children attending St. James' School in August.

(*i*) *Review of—*

(i) *The methods and results of instruction in personal hygiene and temperance in the public elementary schools in the area:*

(ii.) *The methods and results of physical or breathing exercises in the school;*

(iii.) *Arrangement for open air schools, schools, school camps, &c., under Article* 44 (*g*) *of the Code of* 1908.

(i.) Hygiene and Temperance—

On pages 187 and 191 Annual Report for 1909, I described the teaching in these subjects which was at present being given in the Hereford schools.

In the report for 1910 by the Chief Medical Officer of the Board of Education, some useful advice is given on pages 237 and 238. It is pointed out that in connection with the teaching of hygiene practice is needed, and that precept alone is of comparatively little value.

"The matters most vital to the healthy growth and development of the child are :—Cleanliness in its widest meaning ; fresh air and sunshine ; nutrition ; clothing ; exercise, rest, and sleep ; and the home, its necessities and conveniences. It is on such subjects that the teaching should be based, the teaching being graded in accordance with the age of the children. It should be above all things practical and direct. Children should be made to do things (*e.g.*, clean their teeth, brush their hair, clean their boots) not once, but regularly, until the habit of doing them is formed to a greater or less degree. If a child leaves school with, for example, personal habits of cleanliness, neatness and tidiness, with a practical knowledge of how to keep a house or even a room clean, wholesome and comfortable, having good habits of eating and drinking, a practical idea of the kind of food required in a working-class family, some knowledge of the hygiene of clothing, and understanding the need of sufficient rest and sleep, a great and lasting work has been accomplished."

Sir George Newman, on pages 237 of his report, gives an account of tooth brush drill which is practised among the girls attending Horsmonden (Church of England) Mixed School, Kent.

INFANT CARE AND MANAGEMENT.

Reference was made on page 84 Annual Report for 1910, to an important memorandum issued on these subjects by the Board of Education. Instruction is now being given on the lines indicated, and there can be no doubt that such instruction will be of the greatest service to the girls in the future.

COOKERY AND LAUNDRY WORK.

Cookery Classes for the elder girls in the elementary schools have been held for the last 10 years. In July, 1911, the old Percival Hall at the back of the Town Hall in East Street was opened as a cookery centre, after certain alterations had been carried out to meet with the approval of the Board of Education ; since January, 1912, laundry work has also been taught. There are two large classrooms 21 feet and 20 feet 10in. in length, and 20 feet broad, separated by a glass-panelled partition, thus allowing of two classes being held at one time. The room on the west side is lighted by two sash windows and a window above the door on the south side, and two new sash windows on the north side; there is also a window in the roof. The other room is lighted by four sash windows on the south side, a new hopper window above the door on the north side, and a window in the roof. The roof windows and the window above the door on the south side do not open. The walls have been distempered light green, and the lower portion painted a darker colour. Radiators and pipes are provided for heating. The lighting and ventilation are good. The sash windows on the south side now open top and bottom; previously the upper part only was made to open. A sink of white glazed ware, a coal range and a gas cooking range have been provided in each room, also a grilling gas cooking range. Hot and cold water are provided.

There is a scullery adjoining the class-rooms 16ft. 3in. long and 10 feet 6in. broad, which contains a boiler for washing, a stove for heating irons for laundry work, and a sink. The various utensils are also kept here.

It is intended to fit up a third class-room which measures 20 feet by 15 feet 16 in. for teaching housewifery.

At present the elder girls are instructed in cookery by Miss Randall and Miss Gilbert, and classes in laundry work have been held by Miss Gilbert since January, 1912. The course of instruction is as follows:—

COOKERY, COURSE A.—Primary principles of cookery: children are taught to prepare simple dishes by various methods, including boiling and stewing, baking, roasting, &c.

COURSE B.—The different methods of cookery are revised, and more advanced instruction given in the preparation of dishes; the food values of the different dishes are also explained.

LAUNDRY, COURSE A.—This includes the treatment of the different materials and various classes of clothing. The sources and use of all stores used in laundry work, *e.g.*, soap, soda, salt, starch, vinegar, water, &c., are explained.

COURSE B.—A more advanced course: cold water starching is specially taught.

The food value of the different dishes is included in the syllabus referred to above. It is important that the children attending the cookery classes should be taught the relative nutritious value and cost of the various foods. In some families, owing to the low wages, the problem of providing sufficient food is a difficult one. In other cases there is wasteful expenditure where the income is sufficient.

I mentioned in last year's report that diagrams shewing various particulars in regard to cost and nutritive value of the various foods could be obtained. Hereford children are taught to prepare breakfast (including the preparation of porridge) as well as dinner dishes. The managers have kindly allowed the use of the caretaker's house, adjoining the old St. Peter's Infants' School, for the purpose of instruction in household management. The house has been re-papered and painted, also furnished under Miss Walton's direction. The elder girls attending St. Peter's Council School now receive instruction in household matters.

(ii.) Physical and Breathing Exercises—

On pages 192 and 193 Annual Report for 1909 reference is made to the physical exercises in the school. There can be no doubt of the value of these exercises.

Children are encouraged to take part in out-door games of every sort. More boys ought to join in games such as cricket and football, as there can be no doubt of the beneficial effect from a health point of view. It is also important that girls should join in outdoor games, and in Hereford every facility is given by the Town Council for boys and girls to learn to swim. From May 15th to Sept. 30th, 1911, for a period of 13 weeks (excluding the holidays) 360 boys and 192 girls attended classes at the Public Baths; altogether 7,247 tickets at 2d. each were issued, and the whole cost, including tuition, borne by the Council. Thirty-seven girls and 173 boys obtained certificates of proficiency, in the case of the girls 23 for 20 yards and 14 for 50 yards, whilst the boys gained 86 for 20 yards and 87 for 50 yards.

In 1910 a bathing pavilion was erected at Bartonsham for the use of bathers. The number of persons (of which a large proportion were boys) who used the station during 1910 and 1911 is as follows :—

Year.	*Morning.*	*Evening.*	*Total.*
1910 ..	2,100	5,933	8,033
1911 ..	5,362	11,107	16,469

The bathing station was also used by 395 lady bathers in 1910 and 950 in 1911.

During medical inspection one sometimes meets with boys who come from good homes, but who are naturally delicate. In reply to questions from parents I often recommend that children, who are not very strong should spend as much time as possible in the open, air and join in every kind of outdoor game; it is wonderful what an improvement often takes places in the physique of the child. A weakly child should not for preference after leaving school be sent to an indoor occupation. I have often recommended the parents of weakly children (some of them with badly developed chests and a tendency to Phthisis), to send them to some outdoor occupation, *e.g.*, agricultural. It has been proved by statistics that gardeners and those engaged in agriculture are the longest lived.

(iii.) Open-Air Schools, &c.

There are no open-air schools in this town ; in fact it is questionable whether they are necessary. A few minutes walk from even the centre of the town brings one to the open country. I think it is very desirable that the additional window ventilation which I have recommended in the case of some of the schools should be carried out, in order that the conditions during the summer weather may approximate to those of an open-air school ; it is an advantage to have some French windows, which can be thrown wide open. Classes are held in the playground in connection with some of the schools during the hot weather, and these should be encouraged.

MENTALLY DEFECTIVE CHILDREN, &c.

(*h.*) *Review of the methods adopted and the adequacy of such methods of dealing with blind, deaf, mentally or physically defective and epileptic children under the Acts of* 1893 *and* 1899.

I referred on pages 86 and 87 in the report for 1910, to mentally defective children in the city, and that in two cases the parents of a boy aged 12 and a girl aged 11 years were willing to allow their children to go to an institution. The girl was admitted to the Sandlebridge School in Cheshire, and the boy to Littleton House, Uxbridge. There has been improvement in the mental and physical condition of both children. Although there are no special classes for mentally defective children, in several of the schools, children who are backward either through mental or physical defect, are put in one class and so receive more individual attention. It is important that the physical condition of the child should be taken into account in respect to any standard of education.

A boy aged 13 years is still at the Royal Institution for the Deaf and Dumb, Edgbaston, Birmingham.

(*i.*) *Account of Miscellaneous Work.*

Inspection Clinic.—During the last three years I have examined at the health office each morning between 9-30 and 10-30 a.m. any children referred to me by the teachers for examination. Children are sent suffering from skin disease, tonsillitis, &c., any who do not appear to be in normal health and are not under treatment by a doctor. Several children were also referred to me by the School Attendance Officer in regard to their fitness to attend school. I have also re-examined children with Phthisis, and other children found defective during medical inspection. The clinic has gradually developed. Eight children were examined during 1909, 34 in 1910, and 122 last year. Of the children examined last year, children with tonsillitis and infectious disease have already been referred to, the remaining cases were as follows :—

Skin Disease—	
Scabies	6
Impetigo	7
Ringworm	6
Eczema	1
Boils	3
Bronchitis	2
Anæmia	2
Heart Disease	1
Defective vision	1
Ear discharge	1
Verminous condition of the head and sores	3
Nasal discharge	1
Infantile paralysis	1
Mentally deficient	1
Old scars, left cornea	1
Abscess on forehead	1
Carious teeth	3

I also examined three children (2 boys and a girl) whose mother had died from Phthisis, but was unable to detect any disease in the children.

Eight of the children with contagious skin disease, and a boy with heart disease were re-examined before returning to school. The children sent for examination by the teachers came from six different schools.

Children with contagious or infectious disease were excluded until free from infection, and other children until fit to attend school. In every case the parents of children who were not fit to attend school were asked to obtain medical advice.

I am,

Your obedient Servant,

J. W. MILLER.

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TABLE I. (L.G.B.)

HEREFORD URBAN DISTRICT.

Vital Statistics of Whole District during 1911 and previous years.

Year.	Population estimated to Middle of each Year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.†		Nett Deaths belonging to the District.			
		Uncorrected Number.	Nett.				of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of Age.		At all Ages.	
			Number.	Rate.	Number.*	Rate.			Number.	Rate per 1,000 Nett Births.	Number.	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1906	21996	479		21.8	376	17.09	41	7	69	144	342	15.5
1907	22115	536		24.2	351	15.8	41	11	51	95	321	14.5
1908	22235	482		21.6	349	15.6	30	10	46	95	327	14.7
1909	22355	486		21.7	350	15.6	37	11	52	107	324	14.4
1910	22476	495		22.02	346	15.3	42	4	50	101	308	13.7
1911	**22598**	**436**	**432**	**19.1**	**386**	**17.0**	**42**	**11**	**40**	**92**	**355**	**15.7**

* In Column 6 are included the whole of the deaths registered during the year as having actually occurred within the district.

† "Transferable Deaths" are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.

I.	II.	III.
Institutions within the District receiving sick and infirm persons from outside the District.	Institutions outside the District receiving sick and infirm persons from the District.	Other Institutions the Deaths in which have been distributed among the several localities in the District.
Workhouse. Herefordshire General Hospital.	Lunatic Asylum.	Isolation Hospital.

Area of District in acres (exclusive of area covered by water)	**5,031**	Total population at all ages -	**22,568**	At Census of 1911.
		Number of inhabited houses -		
		Average number of persons in each house - - -		

TABLE II. (L.G.B.)

HEREFORD URBAN DISTRICT.

Cases of Infectious Disease notified during the Year 1911.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.								TOTAL CASES NOTIFIED IN EACH WARD.			Total cases removed to Hospital.
	At Ages—Years.											
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 & upwards	Ledbury Ward.	Leominster Ward.	Monmouth Ward.	
Small-pox	..	..	..	..	..	..	..	..	..	..	..	..
Cholera	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous Croup)	38	..	3	29	2	3	..	1	14	21	3	31
Erysipelas	17	..	..	3	1	5	5	3	3	7	7	..
Scarlet Fever	47	..	10	28	7	2	..	..	21	14	12	41
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	2	..	..	1	1	..	..	..	..	2	..	..
Relapsing Fever	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	..	..	..	..	..	..	..	..	..	..	..	..
Plague	..	..	..	..	..	..	..	..	..	..	..	..
Phthisis (under Tuberculosis Regulations, 1908)	12	..	1	..	3	5	2	1	5	4	3	..
,, (under Tuberculosis Regulations, 1911)	..	..	..	..	..	..	..	..	..	..	..	..
,, Others	10	..	..	1	3	5	1	..	5	3	2	..
Totals	**126**	**0**	**14**	**62**	**17**	**20**	**8**	**5**	**48**	**51**	**27**	**72**

NOTES.—The Isolation Hospital for Infectious Diseases is in the parish of Tupsley, in the Ledbury Ward, within the liberties of the City. No. of beds, 32. Two diseases can be treated concurrently.

The Isolation Hospital for Small-pox is in the parish of Hampton Bishop, outside the liberties of the City. No. of beds, 12.

The Workhouse, Prison, and the Herefordshire General Hospital are in the Ledbury Ward.

TABLE III. (L.G.B.)

HEREFORD URBAN DISTRICT.

Causes of, and Ages at, Death during year 1911.

CAUSES OF DEATH.	Nett Deaths at the Subjoined Ages of "Residents" whether occurring within or without the District (a)									Total Deaths whether of 'Residents' or 'Non-Residents' in Institutions in the District (b)
	All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
1	2	3	4	5	6	7	8	9	10	11
All Causes } Certified	353	39	4	10	9	18	32	78	163	110
All Causes } Uncertified	2	1	..	..	..	..	..	..	1	..
Enteric Fever	..	..	..	..	..	..	..	..	..	..
Small-Pox	..	..	..	..	..	..	..	..	..	..
Measles	4	..	2	1	1	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	3	..	..	1	2	..	..	..	..	3
Influenza	..	..	..	..	..	..	..	..	..	..
Erysipelas	..	..	..	..	..	..	..	..	..	..
Cerebro-Spinal Fever	..	..	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis)	22	..	..	..	..	7	9	4	2	6
Tuberculous Meningitis	3	..	1	..	2	..	..	..	..	3
Other Tuberculous Diseases ..	2	2	..	..	..	..	..	..	..	..
Rheumatic Fever	..	..	..	..	..	..	..	..	..	..
Cancer, malignant disease	32	..	..	..	..	..	5	14	13	10
Bronchitis	15	4	..	..	..	..	..	1	10	3
Broncho-Pneumonia	12	5	1	3	..	..	..	1	2	2
Pneumonia (all other forms) ..	20	2	..	..	..	1	3	6	8	7
Other diseases of Respiratory Organs	6	..	..	1	..	..	..	2	3	2
Diarrhœa and Enteritis	11	6	..	..	..	..	..	1	4	..
Appendicitis and Typhlitis ..	4	..	..	1	1	..	1	..	1	6
Alcoholism	..	..	..	..	..	..	..	..	..	..
Cirrhosis of Liver	2	..	..	..	..	..	..	1	1	..
Nephritis and Bright's Disease ..	8	..	..	..	..	2	2	1	3	3
Puerperal Fever	..	..	..	..	..	..	..	..	..	..
Other Accidents and Diseases of Pregnancy and Parturition ..	2	1	..	..	..	..	1	..	..	2
Congenital Debility and Malformation, including Premature Birth	14	14	..	..	..	..	..	..	..	1
Violent Deaths, excluding Suicide	6	..	..	1	1	..	2	1	1	9
Suicides	..	..	..	..	..	..	..	..	..	..
Heart Disease	43	..	..	..	..	2	3	15	23	11
Old Age	52	..	..	..	..	..	..	1	51	13
Other Defined Diseases	94	6	..	2	2	6	6	30	42	29
Diseases ill-defined or unknown ..	..	..	..	..	..	..	..	..	..	..
TOTALS	355	40	4	10	9	18	32	78	164	110

(a) All "Transferable Deaths" of residents, *i.e.*, of persons resident in the District who have died outside it, are to be included with the other deaths in columns 2—10. Transferable deaths of non-residents, *i.e.*, of persons resident elsewhere in England and Wales who have died in the district, are in like manner to be excluded from these columns. For the precise meaning of the term "transferable deaths" see footnote to Table 1.

The total deaths in column 2 of Table III should equal the figures for the year in column 12 of Table I.

(b) Under this heading are to be included deaths registered as due to Epidemic Diarrhœa, Epidemic Enteritis, Infective Enteritis, Zymotic Enteritis, Summer Diarrhœa, Choleraic Diarrhœa, Cholera (other than Asiatic), Gastro-Enteritis, Gastro-Intestinal Catarrh, Muco-Enteritis, Colitis, &c. Deaths from Diarrhœa secondary to some other well-defined disease should be included under the latter.

Dysentery is entered under a separate heading below Cerebral-Spinal Fever.

TABLE IV. (L.G.B.)

HEREFORD URBAN DISTRICT.

INFANTILE MORTALITY DURING THE YEAR 1911.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-3 Months.	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under 1 year.
ALL CAUSES { Certified	8	4	1	5	18	4	7	7	3	39
ALL CAUSES { Uncertified	..	..	..	..	..	..	..	..	1	1
Small-pox	..	..	..	..	..	..	..	..	..	..
Chicken-pox	..	..	..	..	..	..	..	..	..	..
Measles	..	..	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	..	..	..	..	..	..	..	..	..	..
Whooping-Cough	..	..	..	..	..	..	..	..	..	..
Diarrhœa	..	..	..	2	2	..	..	1	..	3
Enteritis	..	..	..	..	..	..	2	1	..	3
Tuberculous Meningitis	..	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis (*b*)	..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases	..	..	..	..	..	1	1	..	..	2
Congenital Malformations (*c*)	..	..	..	..	..	..	..	..	..	..
Premature Birth	3	1	..	1	5	..	..	..	..	5
Atrophy, Debility and Marasmus	3	2	1	1	7	1	..	1	..	9
Atelectasis	..	..	..	..	..	..	..	..	..	..
Injury at Birth	..	..	..	..	..	..	..	..	..	..
Erysipelas	..	..	..	..	..	..	..	..	..	..
Syphilis	..	..	..	..	..	..	..	..	..	..
Rickets	..	..	..	..	..	..	..	..	..	..
Meningitis (*not Tuberculous*)	..	..	..	..	..	..	..	..	..	..
Convulsions	..	1	..	1	2	..	..	1	2	5
Gastritis	..	..	..	..	..	..	..	..	..	..
Laryngitis	..	..	..	..	..	..	..	..	..	..
Bronchitis	1	..	..	..	1	..	1	2	..	4
Pneumonia (all forms)	..	..	..	..	..	2	2	1	2	7
Suffocation, overlying	..	..	..	..	..	..	..	..	..	..
Other Causes	1	..	..	..	1	..	1	..	..	2
TOTALS	8	4	1	5	18	4	7	7	4	40

District—CITY OF HEREFORD.

Births in the year { Legitimate, 404. Illegitimate, 28.

Population (Estimated to middle of 1911) 22,598.

Deaths in the year { Legitimate, 35. Illegitimate, 5.

Deaths from All Causes at all Ages, 355.

TABLE A.

CITY OF HEREFORD.

DEATHS OF RESIDENTS FROM ALL CAUSES.

	AGES.													All ages		TOTAL.	WARDS.		
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 & up	M.	F.		Ledbury	Leo-minster.	Mon-mouth.
1. SPECIFIC FEBRILE, OR ZYMOTIC DISEASES	4	4	2	2	1				2	1	2	2		8	12	20	8	8	4
2. PARASITIC DISEASES																			
3. TUBERCULAR DISEASES	2	1	2		3	4	5	4	4		2			12	15	27	13	9	5
4. DIETETIC DISEASES																			
5. CONSTITUTIONAL DISEASES						1	1	4	5	10	13	4	1	16	23	39	10	19	10
6. DEVELOPMENTAL DISEASES	14									1	9	25	17	31	35	66	21	20	25
7. LOCAL DISEASES	20	8	2		4	5	4	12	27	27	63	19	6	109	88	197	72	74	51
8. DEATHS FROM VIOLENCE		1	1					2		1		1		1	5	6	2	1	3
TOTALS	40	14	7	2	8	10	10	22	38	40	89	51	24	177	178	355	126	131	98
I.—SPECIFIC, FEBRILE, OR ZYMOTIC DISEASES.																			
1.—ZYMOTIC DISEASES.																			
Smallpox																			
Measles		3	1											4		4	3		1
Scarlet Fever																			
Typhus Fever																			
Influenza										1					1	1		1	
Whooping Cough																			
Diphtheria		1	1	1										1	2	3	1	2	
Enteric Fever																			
Epidemic, or Zymotic Enteritis	4													2	2	4	2		2
2.—VENEREAL DISEASES.																			
3.—MALARIAL DISEASES.																			
4.—ZOOGENOUS DISEASES.																			
5.—SEPTIC DISEASES.																			
Erysipelas																			
Puerperal Fever																			
Gangrene											1	2		1	2	3	1	2	
Pyaemia									1						1	1		1	
Septicæmia				1	1										2	2	1		1
Cellulitis									1		1				2	2		2	
II.—PARASITIC DISEASES.																			
Thrush																			
Worms, &c.																			
III.—TUBERCULAR DISEASES.																			
Phthisis					3	4	5	4	4		2			9	13	22	8	9	5
Tubercular Meningitis		1	2											1	2	3	3		
General Tuberculosis	2													2		2	2		
IV.—DIETETIC DISEASES.																			
Want of Breast Milk, Starvation																			
Scurvy																			
Alcoholism, Delirium Tremens																			
V.—CONSTITUTIONAL DISEASES.																			
Rheumatoid Arthritis									1		1			1	1	2	2		
Rheumatism											2				2	2		1	1
Cancer							1	4	4	10	9	3	1	12	20	32	7	16	9
Other Malignant Diseases																			
Diabetes Mellitus						1					1	1		3		3	1	2	
Graves' Disease																			
Purpura																			
Addison's Disease																			
VI.—DEVELOPMENTAL DISEASES.																			
Premature Birth	5													2	3	5	3	2	
Congenital Defects																			
Atrophy, Debility, Marasmus	9													8	1	9	2	4	3
Rickets																			
Old Age										1	9	25	17	21	31	52	16	14	22
VII.—LOCAL DISEASES.																			
1.—DISEASES OF NERVOUS SYSTEM.																			
Convulsions	5	1												4	2	6	3	1	2
Meningitis (Cerebral)			1		2									2	1	3	2	1	
Cerebral Atrophy																			
Apoplexy (Hæmorrhage)								1	5	9	13	2	1	21	10	31	14	11	6
Brain (bulbar) Paralysis											1			1		1		1	
Paraplegia													1		1	1			1
Softening of the Brain									1	1	1	1		1	3	4	1	2	1
Cerebral Abscess																			
Locomotor Ataxia									2					2		2		2	
Epilepsy					1	1	1	1				1		1	4	5	1	2	2
Melancholia									1					1		1			1
Myelitis											2			1	1	2	1	1	
2.—DISEASES OF ORGANS OF SPECIAL SENSE																			
3.—DISEASES OF CIRCULATORY SYSTEM.																			
Diseases of Heart						2		3	6	9	13	7	3	19	24	43	15	15	13
Cerebral Thrombosis												1		1		1		1	
Cerebral Embolism											1				1	1			1
Aneurysm									2					2		2	1	1	
Arterio Sclerosis										1		3		2	2	4		2	2
Varicose Veins											1				1	1			1
4.—DISEASES OF RESPIRATORY ORGANS.																			
Bronchitis	4									1	10			5	10	15	7	4	4
Pneumonia	7	4				1		3	5	2	6	3	1	19	13	32	11	14	7
Pleurisy									1	1					2	2	2		
Asthma											3			1	2	3	1	1	1
Croup		1												1		1	1		
5.—DISEASES OF DIGESTIVE SYSTEM.																			
Gastritis									1					1		1			1
Gastric Ulcer											2				2	2	1	1	
Dyspepsia										1				1		1	1		
Obstructive Diseases of Intestine	1										1			2		2		1	1
Appendicitis		1	1				1				1			3	1	4	2	1	1
Cirrhosis of Liver									1		1			2		2		2	
Jaundice		1													1	1		1	
Gastro-enteritis	2								1		4			4	3	7	4	1	2
Peritonitis								1		1				1	1	2		1	1
Other Disease of Intestine							1	1						1	1	2		2	
6.—DISEASES OF LYMPLATIC SYSTEM.																			
7.—DISEASES OF URINARY SYSTEM.																			
Nephritis and Bright's Disease					1	1		2		1	2	1		7	1	8	4	2	2
Other Diseases of Urinary System									1		1			2		2		2	
8.—DISEASES OR ACCIDENTS ASSOCIATED WITH PARTURITION.																			
Puerperal Eclampsia							1								1	1		1	
Other	1														1	1			1
9.—DISEASES OF REPRODUCTIVE SYSTEM.																			
10.—DISEASES OF INTEGUMENTARY SYSTEM.																			
VIII.—DEATHS FROM VIOLENCE.																			
1.—ACCIDENTS OR NEGLIGENCE.																			
Suffocation																			
Burns		1													1	1		1	
Injuries			1									1		1	1	2	2		
Drowning								2		1				1	2	3			3
2.—HOMICIDE																			
3.—SUICIDE.																			
TOTALS	40	14	7	2	8	10	10	22	38	40	89	51	24	177	178	355	126	131	98